



U.S. Department of Transportation
Federal Railroad Administration

Report to Congress:

2022 Actions to Implement Unmet Statutory
Mandates and Address Open Recommendations
Regarding Railroad Safety

**Rail Safety Improvement Act of 2008, Section 106, Public Law
110-432**

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Abbreviations, Acronyms, and Phrases in this Report

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| AAR | Association of American Railroads |
| ANPRM | Advance Notice of Proposed Rulemaking |
| ASLRRA | American Short Line and Regional Railroad Association |
| ATD | Anthropomorphic Test Device |
| ATIP | Automated Track Inspection Program |
| CFR | Code of Federal Regulations |
| CRM | Crew Resource Management |
| DOT | U.S. Department of Transportation |
| EEBA | Emergency Escape Breathing Apparatus |
| FAST Act | <i>Fixing America's Surface Transportation Act</i> , P.L. 114-94 |
| FHWA | Federal Highway Administration |
| FMCSA | Federal Motor Carrier Safety Administration |
| FR | <i>Federal Register</i> |
| FRA | Federal Railroad Administration |
| FRMP | Fatigue Risk Management Plan |
| IIJA | <i>Infrastructure Investment and Jobs Act</i> , P.L. 117-58 |
| MOW | Maintenance of Way |
| MUTCD | Manual on Uniform Traffic Control Devices |
| NIP | National Inspection Plan |
| NPRM | Notice of Proposed Rulemaking |
| NTSB | National Transportation Safety Board |
| ODAPC | Office of Drug and Alcohol Policy and Compliance |
| OIG | U.S. Department of Transportation Office of Inspector General |
| OSA | Obstructive Sleep Apnea |

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| PAT | Post-Accident Toxicological Testing |
| PHMSA | Pipeline and Hazardous Materials Safety Administration |
| PRA | Paperwork Reduction Act of 1995 |
| PTC | Positive Train Control |
| P.L. | Public Law |
| RMM | Roadway Maintenance Machines |
| RRP | Risk Reduction Program |
| RSAC | Railroad Safety Advisory Committee |
| RSIA | <i>Rail Safety Improvement Act of 2008, P.L. 110-432</i> |
| RWP | Roadway Worker Protection |
| SSP | System Safety Program |
| SUPPORT Act | <i>Substance Use–Disorder Prevention that Promotes Opioid Recovery and Treatment for Patients and Communities Act, P.L. 115-271</i> |
| TAW | Train Approach Warning |
| Volpe | U.S. DOT Volpe National Transportation Systems Center |
| U.S.C. | United States Code |

Legislative Direction

Source: *Rail Safety Improvement Act of 2008 (RSIA)*, section 106

SEC. 106. REPORTS ON STATUTORY MANDATES AND RECOMMENDATIONS.

Not later than December 31, 2008, and annually thereafter, the Secretary shall transmit a report to the House of Representatives Committee on Transportation and Infrastructure and the Senate Committee on Commerce, Science, and Transportation on the specific actions taken to implement unmet statutory mandates regarding railroad safety and each open railroad safety recommendation made by the National Transportation Safety Board or the DOT's Inspector General.

Reliance on the Federal Railroad Administration (FRA) 2021 Report

In preparing this report on behalf of the U.S. Secretary of Transportation (Secretary), FRA relied on the previous report titled, *2021 Actions to Implement Unmet Statutory Mandates and Address Open Recommendations Regarding Railroad Safety* (2021 Report), which was transmitted to the appropriate congressional committees to fulfill this requirement on June 15, 2022. The 2021 Report included all mandates and recommendations open as of December 31, 2021. Mandates and recommendations either added to or removed from those discussed in the 2021 Report are noted below.

Treatment of Railroad Safety Mandates in RSIA, the Fixing America's Surface Transportation (FAST) Act, and the Infrastructure Investment and Jobs Act (IIJA)

The RSIA, the FAST Act, and the IIJA introduced numerous mandates regarding railroad safety. Some IIJA mandates require action to be taken after December 31, 2022, and FRA has not included those mandates in this report. FRA has also excluded from this report statutory mandates previously implemented or not due before January 1, 2023, and ongoing mandates requiring FRA to produce regular reports, conduct regular safety inspections, establish rail safety programs, or take other actions with no specific deadline or endpoint. FRA works to fulfill these mandates, recognizes the need to take future actions, and has processes in place to fulfill them. Upon request, FRA will provide the status of any mandate not included in Exhibit A.

Although the RSIA mandate limits the required scope of this report to actions FRA has taken of as of December 31, 2022, in the interest of providing current information, when FRA has taken actions since the start of calendar 2023 responsive to any mandate or recommendation addressed in this report, FRA has also noted that action in this report.

Since submission of the 2021 Report, FRA completed its response to two previously listed mandates, including the mandate of RSIA § 103 (Railroad Safety Risk Reduction) and the mandate of § 8102 of the *Substance Use-Disorder Prevention that Promotes Opioid Recovery and Treatment for Patients and*

Communities Act (SUPPORT Act). FRA issued final rules responsive to each mandate in 2022.¹ Accordingly, neither mandate is referenced in this report.

Discussion of Exhibit A: Unmet Statutory Rail Safety Mandates

Exhibit A lists the seven statutory rail safety mandates that were unmet and actions to implement them, as of December 31, 2022. Four of these mandates were included in the 2021 Report and three new mandates from the IIJA are included. The four remaining previously reported mandates are:

- Emergency escape breathing apparatus (RSIA),
- Development and use of rail safety technology (RSIA),
- Hours of service regulatory authority (RSIA), and
- Passenger locomotive recording devices (FAST Act).

FRA continues to actively work on each of these mandates. Specifically, although FRA previously took action to respond to RSIA's emergency escape breathing apparatus mandate by issuing a guidance document on December 30, 2016, FRA published a Supplemental Notice of Proposed Rulemaking (NPRM) responding to this mandate on March 22, 2023. FRA has also drafted a final rule responding to the FAST Act's recording devices mandate, which is currently under review with the U.S. Office of Management and Budget. Similarly, FRA is on target to complete in 2023 the pilot projects required under RSIA's hours of service mandate.

The three new mandates from the IIJA that were unmet as of December 31, 2022, are:

- Blocked crossing portal report to Congress,
- Comprehensive rail safety review of Amtrak Report to Congress, and
- FRA reporting requirements.

As of December 31, 2022, drafts of the required blocked crossing and reporting requirements congressional reports were under development, and FRA had completed the mandated comprehensive rail safety review of Amtrak. The resulting congressional report regarding this review of Amtrak was under development at the end of 2022 and submitted to Congress on June 20, 2023.

Discussion of Exhibit B: Open Rail Safety Recommendations to FRA by the National Transportation Safety Board (NTSB)

Exhibit B lists the open rail safety recommendations to FRA by the NTSB. In 2022, NTSB did not close or issue any safety recommendations to FRA.

¹ FRA published a final rule responsive to the mandate of § 8102 of the SUPPORT Act on February 2, 2022, and a final rule responsive to RSIA § 103 on June 13, 2022. 87 FR 5719 and 87 FR 35660.

Subpart I of Exhibit B lists the 42 open NTSB recommendations that, as of December 31, 2022, FRA was actively working to address. The 42 NTSB recommendations are grouped by their NTSB classification as follows: items 1 to 26, *Open—Acceptable Response*; items 27 to 31, *Open—Acceptable Alternative Response*; and items 32 to 41, *Open—Unacceptable Response*. Within each group, NTSB recommendations are listed chronologically by the date NTSB issued the recommendation, with the oldest first, and, within the same date of issuance, by the number of the recommendation.

Subpart II of Exhibit B lists the 37 NTSB recommendations that FRA considers satisfied based on its actions that address the recommendation's intent. FRA will take no further action on these recommendations and has asked (or will ask) NTSB to close them. These 37 recommendations (item numbers 42 to 78) are listed separately because as of the end of calendar year (CY) 2022, FRA is not taking any further action on these recommendations. The recommendations in Subpart II are listed chronologically by the date NTSB issued the recommendation, with the oldest listed first and, within the same date of issuance, by the number of the recommendation.

FRA remains committed to working with NTSB to address the agency's outstanding rail safety recommendations to FRA and holds frequent, quarterly meetings with NTSB to discuss open recommendations and potential solutions to those recommendations.

As part of its safety mission, FRA investigates accidents and incidents, taking action to address systemic safety issues including emergency orders and safety advisories, as well as initiating rulemakings, when warranted. For example, in response to a February 3, 2023, rail accident in East Palestine, Ohio, FRA is performing several initiatives relating to items 14, 15, and 37 related to wayside detectors, including issuing two safety advisories as well as initiating a Railroad Safety Advisory Committee (RSAC) working group relating to wayside detectors.

Discussion of Rail Safety Recommendations to FRA by the Office of Inspector General (OIG)

Exhibit C identifies the three rail safety recommendations OIG made to FRA that were open, as of December 31, 2022. These recommendations relate to FRA's use of automated track inspections to aid track safety oversight. In early 2022, OIG made six specific recommendations related to FRA's use of automated track inspection in its track safety oversight program, and FRA successfully implemented actions to close four of those recommendations in CY 2022. FRA is working to fully implement and close the remaining three recommendations in CY 2023.

Conclusion

DOT recognizes the significance of each unmet statutory mandate and open rail safety recommendation from the NTSB and OIG. FRA will continue to focus its efforts on implementing each unmet mandate and addressing each open recommendation in a timely manner to the extent practicable.

Exhibit A: Unmet Statutory Rail Safety Mandates

| Item 1 | | |
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| <p>Citation: RSIA, Public Law (P.L.) 110-432, Div. A, October 16, 2008</p> | <p>Section: Section 413 Emergency Escape Breathing Apparatus</p> <p>Amended 49 United States Code (U.S.C.) by adding new section 20166</p> | <p>Unmet Statutory Mandate: “Not later than 18 months after the date of enactment of RSIA, the Secretary of Transportation shall prescribe regulations that require railroad carriers—(1) to provide emergency escape breathing apparatus suitable to provide head and neck coverage with respiratory protection for all crewmembers in locomotive cabs on freight trains carrying hazardous materials that would pose an inhalation hazard in the event of release; (2) to provide convenient storage in each freight train locomotive to enable crewmembers to access such apparatus quickly; (3) to maintain such equipment in proper working condition; and (4) to provide their crewmembers with appropriate training for using the breathing apparatus.”</p> |
| | | <p>Actions Taken by FRA: On December 30, 2016, FRA issued a guidance document for railroads to use in developing effective EEBA programs to protect railroad employees transporting hazardous materials posing an inhalation hazard. In this guidance document, FRA highlights factors to consider when selecting appropriate EEBA devices and explains various programmatic components to evaluate when developing an EEBA program.</p> <p>FRA published a Supplemental Notice of Proposed Rulemaking responsive to this mandate on March 22, 2023.</p> |
| | | <p>Actions to Be Taken by FRA: FRA will consider comments in response to the Supplemental Notice of Proposed Rulemaking and issue the final rule.</p> |
| Item 2 | | |
| <p>Citation: RSIA, P.L. 110-432, Div. A, October 16, 2008</p> | <p>Section: Section 406 Development and Use of Rail Safety Technology</p> <p>Amended 49 U.S.C. by adding new section 20164</p> | <p>Unmet Statutory Mandate: “(a) In General—Not later than 1 year after enactment of the [RSIA], the Secretary of Transportation shall prescribe standards, guidance, regulations, or orders governing the development, use, and implementation of rail safety technology in dark territory, in arrangements not defined in section 20501 or otherwise not covered by Federal standards, guidance, regulations, or orders that ensure the safe operation of such technology, such as (1) switch position monitoring devices or indicators; (2) radio, remote control, or other power-assisted switches; (3) hot box, high</p> |

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| | | <p>water, or earthquake detectors; (4) remote-control locomotive zone limiting devices;(5) slide fences; (6) grade crossing video monitors; (7) track integrity warning systems; or (8) other similar rail safety technologies, as determined by the Secretary.”</p> <p>Actions Taken by FRA: The PTC mandate under RSIA section 104 delayed work on this project. However, as of December 31, 2020, PTC has been fully implemented on all mandated track segments, and FRA has supported PTC implementation as well as implementation of the final rules related to Risk Reduction Programs (RRPs) and System Safety Programs (SSPs). (Those rules were published on February 18, 2020, and March 4, 2020, respectively.) FRA held this issue in abeyance pending full PTC implementation because PTC systems, by law, are designed to prevent certain accidents or incidents, including movement of trains through switches left in the wrong position. Additionally, FRA expects the risks associated with limited operations in dark territory will, in part, be addressed in the technology implementation plans required as part of railroads’ RRP and SSPs. Additionally, in response to the February 3, 2023, rail accident in East Palestine, Ohio, in April 2023, the FRA proposed and RSAC accepted a task addressing wayside detectors, a technology that can be used to address certain risks in dark territory.</p> <p>Actions to Be Taken by FRA: Given full PTC implementation and railroads’ implementation of the RRP and SSP rules, FRA will continue to work with railroads to ensure significant risk associated with rail operations in dark territory are, as appropriate, addressed in individual railroads’ RRP and SSPs. Additionally, once RSAC has completed its work on wayside detectors, FRA will consider how best to include in the applicable regulatory framework, any resulting RSAC recommendations relative to any detector technology used within dark territory.</p> |
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| Item 3 | | |
| <p>Citation: RSIA, P.L. 110-432, Div. A, October 16, 2008</p> | <p>Section: Section 108 Hours of Service Regulatory Authority Amended 49 U.S.C. by adding new section 21109</p> | <p>Unmet Statutory Mandate: “(e) Pilot Projects.—(1) In General.—Not later than 2 years after the date of enactment of RSIA, the Secretary shall conduct at least 2 pilot projects of sufficient size and scope to analyze specific practices which may be used to reduce fatigue for train and engine and other railroad employees as follows: (A) A pilot project at a railroad or railroad facility to evaluate the efficacy of communicating to employees notice of their assigned shift time 10 hours prior to the beginning of their assigned shift as a method for reducing employee fatigue. (B) A pilot project at a</p> |

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| | | <p>railroad or railroad facility to evaluate the efficacy of requiring railroads who use employee scheduling practices that subject employees to periods of unscheduled duty calls to assign employees to defined or specific unscheduled call shifts that are followed by shifts not subject to call, as a method for reducing employee fatigue.”</p> <p>Actions Taken by FRA: FRA solicited railroads to participate and found railroads already had programs meeting the requirements for each project. For the first pilot project (10-hour notice of next assigned shift), FRA found that because of the unpredictability of trains, either (1) the practice of providing 10-hour notice has been attempted, but it did not work, and the practice was discontinued, or (2) the practice of providing 10-hour notice is not feasible.</p> <p>For the second pilot (paragraph (B) of mandate), FRA found that this scheduling program was already in place on several Class I properties.</p> <p>To complete the mandated projects, FRA collected data on the program at one Class I property and is currently analyzing that data to determine the effectiveness at reducing fatigue.</p> <p>RSAC has accepted a task to consider work and rest practices, commencing working group activities in the summer of 2023.</p> <p>Actions to Be Taken by FRA: FRA will complete data collection and analysis, consider any data garnered through the RSAC task, and publish a report of findings.</p> |
| Item 4 | | |
| <p>Citation: FAST Act, P.L. 114-94, December 4, 2015</p> | <p>Section: Section 11411 Recording Devices Amended 49 U.S.C. by adding new section 20168</p> | <p>Unmet Statutory Mandate: “(a) In General.— Not later than 2 years after the date of enactment of the Passenger Rail Reform and Investment Act of 2015, the Secretary of Transportation shall promulgate regulations to require each railroad carrier that provides regularly scheduled intercity rail passenger or commuter rail passenger transportation to the public to install inward- and outward-facing image recording devices in all controlling locomotive cabs and cab car operating compartments in such passenger trains.”</p> |

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| | | <p>Actions Taken by FRA: FRA published an NPRM responsive to this mandate on July 24, 2019. As of December 31, 2022, a final rule responding to all comments received was under development.</p> |
| | | <p>Actions to Be Taken by FRA: The Office of Management and Budget (OMB) concluded review of the final rule in August 2023. FRA will publish the final rule in 2023.</p> |
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| Item 5 | | |
| <p>Citation: IIJA, P.L. 117-58, November 15, 2021</p> | <p>Section: Section 22404 Blocked Crossing Portal</p> | <p>Unmet Statutory Mandate: “(i)(2) Report to Congress.—Not later than 1 year after the date of enactment of this Act, the Administrator of the [FRA] shall submit a report to the Committee on Commerce, Science and Transportation of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives that describes— (A) based on the information received through the blocked crossing portal, frequent and long-duration blocked highway-rail grade crossings, including the locations, dates, durations, and impacts resulting from such occurrences; (B) the [FRA’s] process for verifying the accuracy of the complaints submitted to the blocked crossing portal, including whether the portal continues to be effective in collecting such information and identifying blocked crossings; (C) the [FRA’s] use of the data compiled by the blocked crossing portal to assess the underlying cause and overall impacts of blocked crossings; (D) the engagement of the [FRA] with affected parties to identify and facilitate solutions to frequent and long-duration blocked highway-rail grade crossings identified by the blocked crossing portal; and (E) whether the blocked crossing portal continues to be an effective method to collect blocked crossing information and what changes could improve its effectiveness.”</p> <p>Actions Taken by FRA: FRA opened the blocked crossing portal in 2019. On June 14, 2022, FRA published a Request for Information to solicit feedback on the portal. As of December 31, 2022, a draft of the mandated report was under development.</p> <p>Actions to Be Taken by FRA: FRA to finalize and publish report.</p> |
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| Item 6 | | |

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| <p>Citation: IIJA, P.L. 117-58, November 15, 2021</p> | <p>Section: Section 22407 Comprehensive Rail Safety Review of Amtrak</p> | <p>Unmet Statutory Mandate: “(a) COMPREHENSIVE SAFETY ASSESSMENT.—Not later than 1 year after the date of enactment of this Act, the Secretary shall—</p> <p>(1) Conduct a focused review of Amtrak’s safety-related processes and procedures, compliance with safety regulations and requirements, and overall safety culture; and</p> <p>(2) Submit a report to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives that includes the findings and recommendations resulting from such assessment.”</p> <hr/> <p>Actions Taken by FRA: FRA completed the review required by paragraph (a)(1) in November 2022, and as of December 31, 2022, a report of the resulting findings and recommendations was under development. FRA subsequently submitted the report to Congress on June 20, 2023.</p> <hr/> <p>Actions to Be Taken by FRA: None.</p> |
| <p>Item 7</p> | | |
| <p>Citation: IIJA, P.L. 117-58, November 15, 2021</p> | <p>Section: Section 22421 FRA Reporting Requirements</p> | <p>Unmet Statutory Mandate: “(a) ELIMINATION OF DUPLICATIVE OR UNNECESSARY REPORTING OR PAPERWORK REQUIREMENTS IN THE FEDERAL RAILROAD ADMINISTRATION.—...</p> <p>(2) Report.—Not later than 1 year after the date of enactment of this Act, the FRA Administrator shall submit a report to the Committee on Commerce, Science and Transportation of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives that—</p> <p>(A) Identifies all of the reporting or paperwork requirements that were terminated pursuant to paragraph (2); and</p> <p>(B) Identifies any statutory reporting or paperwork requirements that are duplicative or unnecessary and should be repealed.</p> <p>(b) SAFETY REPORTING.—Not later than 1 year after the date of enactment of this Act, and annually thereafter for the following 4 years, the Secretary shall update Special Study Block 49 on Form FRA F 6180.54 (Rail Equipment Accident/Incident Report) to collect, with respect to trains involved in accidents required to be reported to the [FRA]—</p> <p>(1) the number of cars and length of the involved trains; and</p> <p>(2) the number of crew members who were aboard a controlling locomotive involved in an accident at the time of such accident.”</p> <hr/> <p>Actions Taken by FRA: As of December 31, 2022, a draft report required by paragraph (a) is under development in FRA.</p> |

As of December 31, 2022, FRA was considering the issues raised in paragraph (b), including what, if any, updates to FRA’s accident and incident reporting regulations should be considered, but FRA had not taken action directly in response to this mandate.

On April 21, 2023, consistent with the Paperwork Reduction Act of 1995 (PRA), FRA published a 60-day PRA notice and on 7/25/23, FRA published an initial 30-day notice. A software issue caused delayed access to comments from stakeholders on the 60-day notice and as a result, FRA published a corrected 30-day notice on 7/24/23, with a comment period that ended on 8/23/23.

Actions to Be Taken by FRA: FRA will complete PRA process and implement use of special study blocks.

Exhibit B: Open NTSB Rail Safety Recommendations to FRA

Subpart I: Open—Acceptable Response

| Item 1 | | |
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| Issue Date: 5/10/2012 | Recommendation Number: R-12-17 | Open NTSB Recommendation: Establish an ongoing program to monitor, evaluate, report on, and continuously improve fatigue risk management systems implemented by operating railroads to identify, mitigate, and continuously reduce fatigue-related risks for personnel performing safety-critical tasks, with particular emphasis on biomathematical models of fatigue. |
| | | Actions Taken by FRA: The RSIA mandates that FRA, as the Secretary’s delegate, issue regulations requiring each covered railroad to include in its RRP a Fatigue Risk Management Plan (FRMP) designed to reduce the fatigue experienced by safety-related employees and reduce the likelihood of accidents, incidents, injuries, and fatalities caused by fatigue. FRMPs must meet certain statutory requirements. In particular, the regulations must require covered railroads to review and revise their FRMPs at least once every two years. The RSIA also requires FRA to review railroads’ RRPs to ensure that they are complying with their programs/plans. The FRMP final rule was published on June 13, 2022. |
| | | Actions to Be Taken by FRA: FRA will submit a closure request to NTSB. |
| Item 2 | | |
| Issue Date: 5/10/2012 | Recommendation Number: R-12-18 | Open NTSB Recommendation: Conduct research on new and existing methods that can identify fatigue and mitigate performance decrements associated with fatigue in on-duty train crews. |
| | | Actions Taken by FRA: See FRA’s response to R-12-17 (Exhibit B, item 1). FRA continues to conduct fatigue related research, particularly to support railroads’ development and effective implementation of FRMPs as noted in response to R-12-17 directly above. |

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| | | Actions to Be Taken by FRA: FRA will continue research. |
| Item 3 | | |
| Issue Date: 5/10/2012 | Recommendation Number: R-12-19 | Open NTSB Recommendation: Require the implementation of methods that can identify fatigue and mitigate performance decrements associated with fatigue in on-duty train crews that are identified or developed in response to R-12-18. |
| | | Actions Taken by FRA: See FRA’s response to R-12-17 (Exhibit B, item 1). FRA received assistance from an RSAC working group and published the FRMP final rule on June 13, 2022. |
| | | Actions to Be Taken by FRA: FRA will submit a closure request to NTSB. |
| Item 4 | | |
| Issue Date: 1/28/2013 | Recommendation Number: R-12-39 | Open NTSB Recommendation: Develop side impact crashworthiness standards (including performance validation) for passenger railcars that provide a measurable improvement compared to the current regulation for minimizing encroachment to and loss of railcar occupant survival space. |
| | | Actions Taken by FRA: FRA issued a final rule, effective January 22, 2019, on passenger equipment safety standards (Passenger Equipment Safety Standards; Standards for Alternative Compliance and High-Speed Trainsets; 83 FR 59182). The final rule amends § 238.715, <i>Roof and side structure integrity</i> , to say that Tier III trainsets (and Tier I trainsets designed to alternative crashworthiness standards) must comply with the requirements in § 238.215, <i>Rollover strength</i> , and § 238.217, <i>Side structure</i> . These Tier I requirements in §§ 238.215 and 238.217 are thereby broadly applicable to both new trainset classifications in the final rule. With the final rule in effect, FRA believes it has addressed Safety Recommendations R-12-39 and R-12-40. |
| | | Actions to Be Taken by FRA: FRA will submit a closure request to NTSB. |

| Item 5 | | |
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| Issue Date: 1/28/2013 | Recommendation Number: R-12-40 | Open NTSB Recommendation: Once the side impact crashworthiness standards are developed in R-12-39, revise 49 Code of Federal Regulations (CFR) 238.217, <i>Side Structure</i> , to require that new passenger railcars be built to these standards. |
| | | Actions Taken by FRA: See FRA’s response to R-12-39 (Exhibit B, item 4). |
| | | Actions to Be Taken by FRA: FRA will submit a closure request to NTSB. |
| Item 6 | | |
| Issue Date: 11/24/2014 | Recommendation Number: R-14-69 | Open NTSB Recommendation: When the proposed system safety program regulation is promulgated, develop, and implement a robust performance-based audit program to ensure that railroads are maintaining effective system safety programs. |
| | | Actions Taken by FRA: The RRP final rule (published February 18, 2020, and conforming amendments published March 4, 2020) requires railroads to conduct annual internal assessments to gain detailed knowledge of the status of program implementation and the degree to which the program is effectively reducing risk. Following this internal assessment, railroads are required to develop improvement plans to address any deficiencies and to provide an annual internal assessment improvement plan to FRA. FRA will also conduct, or cause to be conducted, external audits to assess implementation status and program effectiveness. In response to these external audits, railroads will be required to develop and implement improvement plans approved by FRA. Similarly, the SSP final rule describes how each passenger rail operation must conduct internal system safety program assessments and how FRA will conduct external safety audits. Regulations governing RRPs and SSPs require railroads practice good faith and best effort consultation with directly affected employees. 49 CFR §§ 270.303 and 270.305. FRA has a robust auditing program, and on January 12, 2021, asked NTSB to close this recommendation. On November 17, 2021, NTSB declined to do so, stating that FRA would first need to demonstrate that its audit program is effectively auditing railroads to ensure that they are maintaining effective SSPs and RRPs. |

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| | | <p>Actions to Be Taken by FRA: Railroads have three years to fully implement their plans after FRA approval, but FRA will be conducting audits during those three years to ensure effective and timely implementation of all RRP and SSP processes. Once those implementation audits are initiated, FRA will ask NTSB to close this recommendation.</p> |
| Item 7 | | |
| <p>Issue Date: 12/02/2014</p> | <p>Recommendation Number: R-14-74</p> | <p>Open NTSB Recommendation: Develop a performance standard to ensure that windows (e.g., glazing, gaskets, and any retention hardware) are retained in the window opening structure during an accident and incorporate the standard into 49 CFR 238.221 and 238.421 to require that passenger railcars meet this standard.</p> |
| | | <p>Actions Taken by FRA: The U.S. DOT Volpe National Transportation Systems Center (Volpe) conducted this research on FRA’s behalf. Volpe’s work included the following: (1) a review of current glazing regulations and the competing practical requirements placed on glazing systems; (2) a review of recent accidents in which passenger ejection from window openings due to dislodged glazing panes caused fatalities or injuries; and (3) a research proposal to define the problem, assess current glazing performance, and recommend prototype glazing-system modifications to improve performance. Volpe has completed its research and is preparing a final report.</p> |
| | | <p>Actions to Be Taken by FRA: FRA will re-evaluate this issue after receiving Volpe’s final report and Volpe’s completed research report on vehicle occupant protection systems, which is mandated by Section 22420 of the IIJA.</p> |

| Item 8 | | |
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| Issue Date: 12/30/2014 | Recommendation Number: R-14-75 | Open NTSB Recommendation: Revise 49 CFR Part 213 to define specific allowable limits for combinations of track conditions, none of which individually amounts to a deviation from FRA regulations that requires remedial action, but which, when combined, require remedial action. |
| | | Actions Taken by FRA: In March 2013, FRA published a final rule on vehicle-track interaction safety standards that established new requirements to address unsafe combinations of track alignment and surface conditions. 78 FR 16051. FRA’s track geometry inspection vehicles are programmed to detect combinations of the track geometry conditions identified in the final rule. In addition to the final rule, the full RSAC accepted task 15-02 in 2015 to consider current or proposed track geometry requirements and other relevant information in making recommended changes to the full RSAC. After RSAC’s charter expired in May 2018, and FRA rechartered RSAC in September 2018, the newly formed RSAC accepted a task on this issue and assigned the task to the RSAC Track Safety Standards Working Group. The Working Group did not identify research conclusively pointing to a need to define these limits and the Working Group did not achieve consensus that a combined limit is needed. Upon completing the task, the Working Group recommended that FRA: (1) remove the track geometry parameter runoff from § 213.63, <i>Track Surface</i> ; and (2) standardize the spelling of “gauge” and “alignment” throughout the Track Safety Standards, Compliance Manual, and all other FRA documents. |
| | | Actions to Be Taken by FRA: FRA will continue gathering data on combination geometry defects via FRA’s ATIP program. |
| Item 9 | | |
| Issue Date: 12/30/2014 | Recommendation Number: R-14-76 | Open NTSB Recommendation: Once FRA has completed the actions specified in safety recommendation R-14-75, program your geometry inspection vehicles to detect combinations of conditions that require remedial action. |
| | | Actions Taken by FRA: See FRA’s response to R-14-75 (Exhibit B, item 8). |
| | | Actions to Be Taken by FRA: FRA will adjust geometry inspection vehicles, if necessary. |

| Item 10 | | |
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| Issue Date: 6/9/2016 | Recommendation Number: R-16-33 | Open NTSB Recommendation: Modify FRA Form F 6180.54 (Rail Equipment Accident/Incident Report) to include the number of crewmembers in the controlling cab of the train at the time of the accident to evaluate the safety adequacy of current crew size regulations. |
| | | Actions Taken by FRA: FRA previously asked RSAC to consider changes and updates to 49 CFR Part 225, Railroad Accidents/Incidents: Reports Classification, and Investigations, including the addition of new or desired fields of information to be collected on Form F 6180.54. RSAC accepted a task on this issue and created the RSAC Part 225 Accident Reporting Working Group. The working group met several times between 2019 and 2021 and considered many potential revisions to 49 CFR Part 225, and associated issues. In November 2021, FRA determined that it had gained sufficient insight from these discussions with all members of the working group to move ahead with a rulemaking to update Part 225, and then deactivated the RSAC working group. |
| | | Actions to Be Taken by FRA: FRA is considering a rulemaking to address this issue. In the meantime, FRA is utilizing the Paperwork Reduction Act process to update the special study blocks on a temporary basis. On 4/21/23, FRA published a 60-day PRA notice and on 7/5/23, FRA published an initial 30-day notice. There was a software issue causing delayed access to comments from stakeholders on 60-day notice. Accordingly, as a result, FRA published a corrected 30-day notice on 7/24/23, with a comment period that ended on 8/23/23. |
| Item 11 | | |
| Issue Date: 6/9/2016 | Recommendation Number: R-16-34 | Open NTSB Recommendation: After FRA Form F 6180.54 is modified as specified in R-16-33, use the data regarding number of crewmembers in the controlling cab of the train at the time of the accident to evaluate the safety adequacy of current crew size regulations. |

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| | | <p>Actions Taken by FRA: See FRA’s response to R-16-33 (Exhibit B, item 10).</p> |
| | | <p>Actions to Be Taken by FRA: On July 28, 2022, FRA published an NPRM on train crew size safety requirements, and a final rule is currently under development. After the necessary changes to Form F 6180.54 are implemented, FRA will review the data captured on the form as necessary to continue to effectively evaluate FRA safety requirements.</p> |
| Item 12 | | |
| Issue Date: 3/9/2017 | Recommendation Number: R-17-03 | <p>Open NTSB Recommendation: Evaluate the risks posed to train crews by hazardous materials transported by rail, determine the adequate separation distance between hazardous materials cars and locomotives and occupied equipment that ensures the protection of train crews during both normal operations and accident conditions, and collaborate with PHMSA to revise 49 CFR 174.85 to reflect those findings.</p> |
| | | <p>Actions Taken by FRA: FRA evaluated the risks posed to train crews by hazardous materials transported by rail and developed and evaluated a methodology to establish an appropriate separation distance from occupied locomotives or equipment and the hazardous materials cars in a train, to ensure the protection of train crews during normal operations, as well as during accidents. Because PHMSA is the agency with statutory authority to implement the results of this evaluation, FRA has collaborated with PHMSA to develop proposed revisions to 49 CFR § 174.85. PHMSA intends to address this issue in the HM-265A rulemaking.</p> |
| | | <p>Actions to Be Taken by FRA: FRA will continue to assist PHMSA as necessary to issue the regulation.</p> |
| Item 13 | | |
| Issue Date: 12/28/2017 | Recommendation Number: R-17-18 | <p>Open NTSB Recommendation: Require railroads to install technology on hi-rail, backhoes, other independently operating pieces of maintenance-of-way (MOW) equipment, and on the leading and trailing units of sets of MOW equipment operated by maintenance workers, to provide dispatchers</p> |

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| | | <p>and the dispatch system an independent source of information on the locations of this equipment to prevent unauthorized incursions by trains onto sections of track where maintenance activities are taking place, in accordance with the Congressional mandate under RSIA.</p> <p>Actions Taken by FRA: FRA informed NTSB that the agency would evaluate the feasibility of implementing this recommendation, which could include referring this recommendation to RSAC for consideration. The newly formed Roadway Worker Protection Working Group will take up this recommendation for discussion.</p> <p>Actions to Be Taken by FRA: FRA will complete evaluation of feasibility of implementing recommendation, including evaluation through the RSAC process.</p> |
| Item 14 | | |
| Issue Date: 1/11/2018 | Recommendation Number: R-17-32 | <p>Open NTSB Recommendation: Research and evaluate wheel impact load thresholds to find remedial actions that address the mechanical condition of tank cars used in high-hazard flammable trains.</p> <p>Actions Taken by FRA: On June 28, 2018, FRA sent a letter to NTSB stating FRA would take no further action, and asked NTSB to close this recommendation. In a September 16, 2019 letter, NTSB requested that FRA reconsider its position and reclassified this recommendation as <i>Open—Acceptable Response</i>.</p> <p>AAR has implemented a rule regarding the removal of wheels with a dynamic load of 50 kips or more in combination with a rim thickness of one inch or less. Based on AAR’s rule, and Safety Advisory 2015-01 (addressing wheel impact load detectors), as of December 31, 2022, FRA had concluded that no further action on Safety Recommendation R-17-32 was warranted.</p> <p>Subsequently, in response to the February 3, 2023, accident in East Palestine, Ohio, FRA is taking further actions relating to wayside detectors (RSAC Task No. 2023-01). Accordingly, FRA will reevaluate its response to R-17-32 upon completion of RSAC Task No. 2023-01.</p> |

Actions to Be Taken by FRA: FRA will reevaluate its response to R-17-32 upon completion of RSAC Task No. 2023-01.

Item 15

Issue Date:
1/11/2018

**Recommendation
Number:** R-17-34

Open NTSB Recommendation: Collaborate in the evaluation of safe kip thresholds to determine the remedial actions for suspected defective wheel conditions in high-hazard flammable train service based upon equipment detector data, and revise FRA Safety Advisory 2015-01 and the Association of American Railroads interchange rules.

Actions Taken by FRA: See FRA's responses to R-17-32 and R-17-33 (Exhibit B, items 14 and 37).

As noted in response to R-17-32, AAR has implemented a rule regarding the removal of wheels with a dynamic load of 50 kips or more in combination with a rim thickness of one inch or less. Based on AAR's rule, and Safety Advisory 2015-01 (addressing wheel impact load detectors), as of December 31, 2022, FRA had concluded that no further action on Safety Recommendation R-17-32 was warranted. However, in response to the February 3, 2023, accident in East Palestine, Ohio, FRA is taking further actions relating to wayside detectors (RSAC Task No. 2023-01).

Actions to Be Taken by FRA: FRA will reevaluate its response to R-17-34 upon completion of RSAC Task No. 2023-01.

Item 16

Issue Date:
10/9/2018

**Recommendation
Number:** R-18-25

Open NTSB Recommendation: Study available technologies that automatically alert maintenance-of-way workers fouling tracks of approaching trains, then require that such technology be implemented as a redundant protective measure.

Actions Taken by FRA: Implementing R-18-25 depends on such devices being commercially available and reliable.

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| | | <p>Actions to Be Taken by FRA: FRA will complete a study of available technologies and determine their feasibility to be used as stated in the recommendation.</p> |
| Item 17 | | |
| <p>Issue Date: 3/24/2020</p> | <p>Recommendation Number: R-20-01</p> | <p>Open NTSB Recommendation: Work with PHMSA to develop maximum coupling speed thresholds and impact mass limits for hazardous materials railcars.</p> |
| | | <p>Actions Taken by FRA: FRA and PHMSA agree that overspeed, high-energy coupling events can damage rail rolling stock, including tank cars.</p> <p>On May 26, 2022, FRA and PHMSA notified NTSB that PHMSA would pursue a rulemaking to address this recommendation. Specifically, in coordination with FRA, PHMSA is addressing this issue in its HM-265A rulemaking.</p> |
| | | <p>Actions to Be Taken by FRA: FRA will continue to assist PHMSA with the rulemaking.</p> |
| Item 18 | | |
| <p>Issue Date: 3/24/2020</p> | <p>Recommendation Number: R-20-02</p> | <p>Open NTSB Recommendation: Require that tank cars involved in high-energy coupling-force events undergo a structural integrity inspection by a qualified technician before returning to service.</p> |
| | | <p>Actions Taken by FRA: This recommendation was also issued to PHMSA.</p> <p>Although FRA and PHMSA believe the existing regulations satisfy the intent of this recommendation, on May 26, 2022, FRA and PHMSA notified NTSB that the agencies would pursue a rulemaking to address this recommendation. Specifically, in coordination with FRA, PHMSA intends to further address the issue in its HM-265A rulemaking.</p> |
| | | <p>Actions to Be Taken by FRA: FRA will continue to assist PHMSA with the rulemaking.</p> |

| Item 19 | | |
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| Issue Date: 3/24/2020 | Recommendation Number: R-20-03 | Open NTSB Recommendation: Develop methods to identify tank cars that have sustained overspeed and high-energy coupling force events. |
| | | Actions Taken by FRA: This recommendation was also issued to PHMSA. On May 26, 2022, FRA and PHMSA notified NTSB that the agencies will pursue a rulemaking to address this recommendation. Specifically, in coordination with FRA, PHMSA intends to address the issue in its HM-265A rulemaking. |
| | | Actions to Be Taken by FRA: FRA will continue to assist PHMSA with the rulemaking. |
| Item 20 | | |
| Issue Date: 3/24/2020 | Recommendation Number: R-20-04 | Open NTSB Recommendation: After the successful development of methods to identify tank cars that have sustained overspeed and high-energy coupling force events, require that rail carriers have monitoring processes in place to promptly remove damaged tank cars from hazardous materials service. |
| | | Actions Taken by FRA: This recommendation was also issued to PHMSA. FRA and PHMSA share NTSB’s interest in reducing or eliminating damage to tank car stub sills from overspeed, high-energy, coupling force events. On May 26, 2022, FRA and PHMSA notified NTSB that the agencies would pursue a rulemaking to address this recommendation. Specifically, in coordination with FRA, PHMSA intends to address the issue in its HM-265A rulemaking. |
| | | Actions to Be Taken by FRA: FRA will continue to assist PHMSA with the rulemaking. |
| Item 21 | | |

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| Issue Date: 5/14/2020 | Recommendation Number: R-20-06 | Open NTSB Recommendation: Define when the risks associated with using train approach warning are unacceptable and revise Title 49 Code of Federal Regulations 214.329 to prohibit the use of train approach warning when the defined risks are unacceptable. |
| | | Actions Taken by FRA: FRA introduced an RSAC task proposal, 2022-01, for the RWP Working Group to discuss making TAW a more formalized process and utilize available technology. On October 17, 2022, RSAC voted to accept the task and initial meetings of the working group began in 2022. |
| | | Actions to Be Taken by FRA: FRA will use the RSAC process to evaluate potential improvements to TAW requirements. |
| Item 22 | | |
| Issue Date: 8/27/2020 | Recommendation Number: R-20-11 | Open NTSB Recommendation: Require new roadway maintenance machines to be equipped with operator presence controls to prevent unintended movement and protect workers on and around the machines. |
| | | Actions Taken by FRA: On May 11, 2022, FRA informed NTSB that it will introduce a roadway worker protection task statement, incorporating this recommendation, to RSAC. On October 17, 2022, RSAC voted to accept the task statement and form the RWP Working Group. |
| | | Actions to Be Taken by FRA: FRA will consider how to implement this recommendation as well as any additional safety improvements for roadway maintenance machines (RMMs), through the RWP Working Group. |
| Item 23 | | |
| Issue Date: 10/19/2020 | Recommendation Number: R-20-18 | Open NTSB Recommendation: Review the software changes being developed by the Interoperable Train Control Application Committee regarding positive train control restricted Mode and amend Title 49 Code of Federal Regulations Part 236 to require railroads to revise their positive train control |

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| | | <p>systems to implement engineering controls that will automatically limit the use of restricted Mode on main tracks.</p> <p>Actions Taken by FRA: In January 2021, a Class I railroad filed a request for amendment (RFA) to an Interoperable Electronic Train Management System (I-ETMS) Mixed System Positive Train Control Safety Plan (PTCSP). This RFA relates to the I-ETMS Onboard Software Version 6.3.20.0, which includes changes to I-ETMS restricted mode. The changes include the addition of a set of warning prompts when the train is in restricted mode. If the warning prompts are not acknowledged within a specified period, I-ETMS will initiate enforcement braking. FRA approved this RFA on April 29, 2021. FRA believes this design change is a further mitigation to potential hazards when I-ETMS is in an operating state that does not provide full protection.</p> <p>Actions to Be Taken by FRA: FRA will continue to monitor the effectiveness of the software.</p> |
| Item 24 | | |
| Issue Date: 12/8/2020 | Recommendation Number: R-20-21 | <p>Open NTSB Recommendation: Develop and issue guidance for railroads to use in developing the risk reduction programs required to be submitted for approval by the Federal Railroad Administration.</p> <p>Actions Taken by FRA: After issuance of the RRP rule, FRA conducted extensive training sessions with both railroads and labor, on the rule and the general concept of risk reduction. FRA is currently working with ASLRRA on developing a sample RRP plan.</p> <p>Actions to Be Taken by FRA: FRA will complete work with ASLRRA to finalize the sample plan.</p> |
| Item 25 | | |
| Issue Date: 5/20/2021 | Recommendation Number: R-21-02 | Open NTSB Recommendation: Require all railroads to revise training and increase oversight to ensure that operating crews properly use restricted speeds. |

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| | | <p>Actions Taken by FRA: FRA concurs with the recommendation. The IJJA directed FRA to initiate audits of the training, qualification, and certification programs of locomotive engineers and conductors of railroad carriers. As part of these audits, FRA assesses whether the type and content of training provided to locomotive engineers and conductors are appropriate and adequate. Training for restricted speed, or the functional equivalent, is one element of these audits.</p> |
| | | <p>Actions to Be Taken by FRA: FRA will continue to analyze quarterly and six-month operational testing data to determine proactive strategies to verify that testing of restricted speed is done appropriately. FRA will also continue to evaluate operational testing data, as appropriate, during its safety audits and routine safety oversight practices.</p> <p>Additionally, FRA will emphasize that railroads should utilize technology to review locomotive event recorder data and outward-facing locomotive camera recordings to verify compliance with restricted speed requirements.</p> |
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| Item 26 | | |
| <p>Issue Date: 9/30/2021</p> | <p>Recommendation Number: R-21-03</p> | <p>Open NTSB Recommendation: Modify 49 CFR Part 214 to prohibit the use of train approach warning in controlled track territory during planned maintenance and inspection activities.</p> <p>Actions Taken by FRA: FRA informed NTSB that it will introduce a roadway worker protection task statement to RSAC incorporating this recommendation.</p> <p>On October 17, 2022, RSAC voted to accept the task statement and form the RWP Working Group.</p> <p>Actions to Be Taken by FRA: FRA will consider any resulting RSAC recommendations.</p> |

Subpart I: Open—Acceptable Alternative Response

Item 27

Issue Date:
1/13/2000

Recommendation Number: R-00-02

Open NTSB Recommendation: Develop, then periodically publish, an easy-to-understand source of information for train operating crewmembers on the hazards of using specific medications when performing their duties.

Actions Taken by FRA: FRA has developed an optional training module on the hazards of certain medications, which is available for free on its website. The module may be used as a stand-alone product or as a training template.² FRA publicized the availability of the training module to its railroad and labor contacts, regional offices, inspectors, and other interested parties and the Departmental Office of Drug and Alcohol Policy and Compliance (ODAPC) has publicized the module to its distribution network and has made the module available on ODAPC’s website. In addition, FRA conducted outreach at internal training sessions, industry conferences, and labor and trade association meetings.

Additionally, in response to a September 16, 2019, letter from NTSB asking FRA to revise and shorten the module, in February 2023, FRA published a shortened version of the module on the agency’s website. The pamphlet is available at this link:

<https://railroads.dot.gov/sites/fra.dot.gov/files/2023-02/FRA%20Rx-OTC%20pamphlet%20final%202020123.pdf>

Actions to Be Taken by FRA: None.

Item 28

Issue Date:
1/13/2000

Recommendation Number: R-00-03

Open NTSB Recommendation: Establish and implement an educational program targeting train operating crewmembers that, at a minimum, ensures that all crewmembers are aware of the source of information described in safety

² Available at <https://railroads.dot.gov/elibrary/prescription-rx-and-over-counter-otc-medication-training-and-policy-toolkit>.

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| | | <p>recommendation R-00-02 regarding the hazards of using specific medications when performing their duties.</p> <p>Actions Taken by FRA: See FRA’s response to R-00-02 (Exhibit B, item 27).</p> <p>Actions to Be Taken by FRA: None.</p> |
| Item 29 | | |
| Issue Date: 3/08/2013 | Recommendation Number: R-13-05 | <p>Open NTSB Recommendation: Identify, and require railroads to use in locomotive cabs, technology-based solutions that detect the presence of signal-emitting portable electronic devices and that inform railroad management about the detected devices in real time.</p> <p>Actions Taken by FRA: See FRA’s response to FAST Act section 11411 (Exhibit A, item 4).</p> <p>Actions to Be Taken by FRA: FRA will issue the final rule in 2023.</p> |
| Item 30 | | |
| Issue Date: 8/22/2014 | Recommendation Number: R-14-15 | <p>Open NTSB Recommendation: Promulgate a regulation permitting a train to pass a red signal aspect protecting a moveable bridge that is similar to the criteria for allowing a train to cross a broken rail, as contained in 49 CFR 213.7(d), to ensure that the bridge has been inspected by a qualified employee before a train is authorized to proceed across the bridge.</p> <p>Actions Taken by FRA: On February 25, 2013, FRA issued Safety Advisory 2013-01, <i>Passing Stop Signals Protecting Movable Bridges</i>, to bring to the attention of movable bridge owners the importance of using adequate span locking and exercising caution when allowing a train to pass a stop signal protecting a movable bridge. This advisory emphasizes the importance of providing</p> |

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| | | <p>adequate training to individuals authorized to determine if a movable bridge is properly aligned and locked.</p> <p>Subsequently, on November 7, 2014, FRA published a final rule establishing minimum training standards for all safety-related railroad employees, including employees who are authorized to determine whether moveable bridges are properly aligned and locked. 49 CFR Part 243 (79 FR 66460). The purpose of the training standards rule is to ensure any person employed by a railroad or a contractor of a railroad as a safety-related employee is trained and qualified to comply with Federal railroad safety laws, regulations, and orders, and relevant railroad rules and procedures promulgated to implement those Federal railroad safety requirements. Under this final rule, railroads must submit their training plans to FRA for review and approval. Appropriate training related to moveable bridges is one aspect of a training plan FRA considers in its plan approval process.</p> <p>Actions to Be Taken by FRA: FRA will continue to monitor railroads' compliance with their training programs for categories of safety-related railroad employees who are authorized to determine whether movable bridges are properly aligned and locked.</p> |
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| Item 31 | | |
| <p>Issue Date: 6/21/2019</p> | <p>Recommendation Number: R-19-13</p> | <p>Open NTSB Recommendation: Use your authority to compel all commuter and passenger railroads to meet the requirements in 49 CFR Part 238 without delay, such that in the event of a loss of power, adequate emergency lighting is available to allow passengers, crew members, and first responders to see and orient themselves, identify obstacles, safely move throughout the rail car, and evacuate safely.</p> <p>Actions Taken by FRA: Commuter and intercity passenger railroads already comply with requirements to have and ensure proper functioning of emergency systems to facilitate emergency egress and rescue access. FRA's passenger train emergency systems II rulemaking strengthened these requirements and incorporated American Public Transportation Association (APTA) standards for emergency systems.</p> |

Most passenger cars used in the United States have emergency lighting powered by batteries integrated in the cars with the specific lighting fixtures they support. As an older series, the Talgo Series 6 cars had emergency lighting powered by batteries connected by cables to the cars' light fixtures. When cables were severed during the Amtrak 501 derailment, so too was the emergency lighting from its power source. FRA's requirements for passenger train emergency systems are complementary and include requirements for intercity passenger trains (including the Talgo Series 6) to have auxiliary portable lighting and fixed emergency lighting as part of the railroad's emergency preparedness plan. FRA has sought to phase-in requirements for existing passenger cars where practical, and it enforces the requirements for emergency lighting systems applicable to existing passenger cars through the passenger train emergency systems II rulemaking.

Actions to Be Taken by FRA: The IIA requires FRA to initiate rulemaking to require railroads providing intercity and commuter passenger service to implement periodic inspection to ensure that, in the event of a loss of power, there is adequate emergency lighting available for passengers, crew members, and first responders. On April 3, 2023, FRA published an NPRM responsive to this mandate. 88 FR 19730.

Subpart I: Open—Unacceptable Response

| Item 32 | | |
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| <p>Issue Date: 6/07/2006</p> | <p>Recommendation Number: R-06-07</p> | <p>Open NTSB Recommendation: Require railroads to implement for all power-assisted switch machines—regardless of location—a formal commissioning procedure and a formal maintenance program that includes records of inspections, tests, maintenance, and repairs.</p> |
| | | <p>Actions Taken by FRA: See FRA’s response to R-12-27 (Exhibit B, item 46).</p> <p>The RSAC Dark Territory Working Group considered safety technologies, including power-assisted switch machines and switch point monitoring systems as a primary topic. The Working Group developed a draft document recommending the creation of individual railroad plans for the maintenance, inspection, and testing of certain safety devices, including power-assisted switch machines and switch point monitoring systems. However, FRA’s final rules related to RRP and SSPs were published on February 18, 2020, and March 4, 2020, respectively. With these regulations in place, railroads are required to identify hazards and develop and implement mitigations to address risks on their system, which would include risks associated with power-assisted switch machines in dark territory. Given this new regulatory framework created by the RRP and SSP final rules, no further action on this mandate is necessary.</p> |
| | | <p>Actions to Be Taken by FRA: FRA will continue to work with railroads through their RRP and SSPs to ensure any significant risk associated with the use of power-assisted switch machines in dark territory is addressed. No additional rulemaking is necessary.</p> |
| Item 33 | | |
| <p>Issue Date: 2/23/2010</p> | <p>Recommendation Number: R-10-01</p> | <p>Open NTSB Recommendation: Require the installation, in all controlling locomotive cabs and cab car operating compartments, of crash- and fire-protected inward- and outward-facing audio and image recorders capable of providing recordings to verify that train crew actions are in accordance with rules and procedures that are essential to safety as well as train operating conditions. The devices should have a minimum 12-hour continuous recording capability with recordings that are</p> |

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| | | easily accessible for review, with appropriate limitations on public release, for the investigation of accidents or for use by management in carrying out efficiency testing and system-wide performance monitoring programs. |
| | | Actions Taken by FRA: See FRA’s response to FAST Act section 11411 (Exhibit A, item 4). |
| | | Actions to Be Taken by FRA: FRA will issue final rule in 2023. |
| Item 34 | | |
| Issue Date: 2/23/2010 | Recommendation Number: R-10-02 | Open NTSB Recommendation: Require that railroads regularly review and use in-cab audio and image recordings (with appropriate limitations on public release), in conjunction with other performance data, to verify that train crew actions are in accordance with rules and procedures that are essential to safety. |
| | | Actions Taken by FRA: See FRA’s response to R-10-01 (Exhibit B, item 33). |
| | | Actions to Be Taken by FRA: FRA will issue final rule in 2023. |
| Item 35 | | |
| Issue Date: 3/8/2013 | Recommendation Number: R-13-07 | Open NTSB Recommendation: Require railroads to implement initial and recurrent crew resource management (CRM) training for train crews. |
| | | Actions Taken by FRA: CRM training is best addressed by railroads under the SSP and RRP rules. FRA issued the RRP final rule on February 18, 2020, and a final rule amending the SSP rule on March 4, 2020. Also, FRA expects PTC system implementation to reduce certain human factor-caused accidents and might limit the need for and impact of a CRM training program for train crews. |
| | | Actions to Be Taken by FRA: FRA will assist and encourage railroads to develop CRM training programs as part of their RRP or SSPs. |

| Item 36 | | |
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| <p>Issue Date: 8/14/2013</p> | <p>Recommendation Number: R-13-19</p> | <p>Open NTSB Recommendation: When you have made the determination in safety recommendation R-13-18 [closed 9/5/2018], require railroads to use a reliable, valid, and comparable field test procedure for assessing the color discrimination capabilities of employees in safety-sensitive positions.</p> <p>Actions Taken by FRA: Both FRA’s locomotive engineer and conductor certification regulations contain sufficient requirements to ensure railroads use reliable, valid, and comparable field test procedures. For example, FRA’s regulations require a railroad to include a written visual testing program that includes a railroad’s procedure for evaluating the visual acuity of its engineers and conductors when an individual fails to meet the threshold criteria in 49 CFR Parts 240 and 242. On November 24, 2015, FRA issued an interpretation making this clear and additionally providing best practices for such procedures.</p> <p>FRA routinely reviews railroads’ certification programs and as part of that review, considers each railroad’s field-testing processes. Instances where railroads are found to not be following best practices under the particular circumstances involved are addressed on a case-by-case basis, recognizing that FRA may disapprove a railroad’s program, potentially leading to enforcement action.</p> <p>Actions to Be Taken by FRA: FRA will continue to monitor railroads’ certification programs for compliance with existing requirements and request that NTSB close this recommendation.</p> |
| Item 37 | | |
| <p>Issue Date: 1/11/2018</p> | <p>Recommendation Number: R-17-33</p> | <p>Open NTSB Recommendation: Mandate remedial actions that railroads should take to avoid or identify mechanical defects that are identified by wheel impact load detectors.</p> |

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| | | <p>Actions Taken by FRA: See FRA’s response to R-17-32 (Exhibit B, item 14).</p> <p>While wheel impact load detectors are helpful in identifying defects, they are not sufficiently predictive to justify mandating remedial actions. If a wheel exhibits a high kip reading and a rim thickness of one inch or less, AAR rules authorize that wheel’s removal. FRA has found this interchange rule to be adequate to remove high impact wheels from the fleet. However, in response to the February 3, 2023, accident in East Palestine, Ohio, FRA is taking further actions relating to wayside detectors (RSAC Task No. 2023-01).</p> <p>Actions to be Taken by FRA: FRA will reevaluate its response to R-17-33 upon completion of RSAC Task No. 2023-01.</p> |
| Item 38 | | |
| Issue Date: 9/5/2018 | Recommendation Number: R-18-16 | <p>Open NTSB Recommendation: Review, and modify if necessary, your current inspection guidance regarding watchman/lookout equipment to verify that it requires railroads to provide the necessary equipment for a watchman/lookout to notify a roadway work group of approaching trains and that this accurately reflects the definition contained in 49 CFR 214.7</p> <p>Actions Taken by FRA: FRA reviewed its inspection guidance regarding watchman/lookout equipment and believes it accurately reflects regulatory requirements and the intent of 49 CFR § 214.329. However, FRA submitted an RWP task (RSAC Task 2022-01) that includes consideration of the TAW process, including the definition of watchman/lookout in § 214.7. RSAC has accepted this task and initial meetings of the working group began in 2022.</p> <p>Actions to Be Taken by FRA: FRA will consider any relevant recommendations of the RSAC.</p> |
| Item 39 | | |
| Issue Date: 9/5/2018 | Recommendation Number: R-18-17 | <p>Open NTSB Recommendation: Review railroads’ on-track safety programs to determine if the necessary equipment is required and provided for a watchman/lookout to notify roadway work groups of approaching trains. If deficiencies are discovered, use enforcement options to encourage compliance.</p> |

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| | | <p>Actions Taken by FRA: See FRA’s response to R-18-16 (Exhibit B, item 38).</p> <p>FRA reviewed RWP plans for compliance with 49 CFR Part 214, which ensures railroads list acceptable means for the watchman/lookout to provide a warning. If a railroad’s on-track safety program did not list the means of providing a warning, the railroad was required to revise its program to do so during FRA’s review. FRA has also submitted a RWP task to RSAC (Task 2022-01). FRA is asking RSAC to assess the process of TAW and make recommendations as to how new technology and/or procedures may be able to improve TAW. RSAC has accepted this task and initial meetings of the working group began in 2022.</p> <p>Actions to Be Taken by FRA: FRA will continue monitoring railroads’ implementation of RWP plans and consider any resulting RSAC recommendations.</p> |
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Item 40

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| <p>Issue Date: 1/25/2021</p> | <p>Recommendation Number: R-20-28</p> | <p>Open NTSB Recommendation: Revise Title 49 Code of Federal Regulations Part 232 to require more frequent communication checks between a head-of-train device and an end-of-train device.</p> <p>Actions Taken by FRA: On September 24, 2021, FRA notified NTSB that it concurred with the spirit of the recommendation, and that it planned to work with industry stakeholders, including NTSB, to evaluate what additional actions can be taken to further reduce risks associated with communication loss between head-of-train and end-of-train (EOT) devices. On July 20, 2022, NTSB informed FRA that they did not concur with FRA’s approach and continued to recommend FRA begin a rulemaking. In April 2023, FRA issued Safety Advisory 2023-03, Accident Mitigation and Train Length, which recommends that railroads implement technologies, policies, procedures, and any necessary hardware enhancements to ensure two-way EOT devices maintain continuous and uninterrupted communications to and from the front and rear units. It also recommended that railroads develop, implement, and maintain clear rules to follow in the event of a loss of communication between EOT devices.</p> <p>Actions to Be Taken by FRA: FRA will evaluate whether to pursue a rulemaking.</p> |
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| Item 41 | | |
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| Issue Date: 1/25/2021 | Recommendation Number: R-20-29 | Open NTSB Recommendation: Require emergency brake signal transmission to be repeated until received by the end-of-train device. |
| | | Actions Taken by FRA: See FRA's response to R-20-28 (Exhibit B, item 40). |
| | | Actions to Be Taken by FRA: FRA will evaluate whether to pursue a rulemaking. |

Subpart II: Open NTSB Rail Safety Recommendations FRA Will Not Further Address

Item 42

Issue Date:
8/11/1998

Recommendation Number:
I-98-01

Open NTSB Recommendation: Develop and implement a field test program for in-vehicle safety and advisory warning systems.

NTSB Classification and Actions Taken by FRA: *Open—Unacceptable Response.* FRA undertook several projects to test intelligent transportation systems to improve safety or mobility at highway-rail grade crossings and released the Vehicle Proximity Alert System. FRA partnered with FHWA and Volpe to demonstrate a rail crossing violation warning system using connected vehicles technologies. Based on a concept of operation developed by FRA, and using standardized connected vehicle hardware and communications, the system was to provide an in-vehicle warning to a driver approaching a grade crossing with active grade crossing warning devices to allow the driver to stop before entering the crossing. FRA contracted for development, field demonstration, and requirements verification testing of the technology, which was completed in June 2017. On September 1, 2017, FRA sent a letter to NTSB detailing its actions and asking NTSB to continue to classify this recommendation as *Open—Acceptable*. After sending this letter and FRA’s further review of the resulting data, FRA concluded some tested technologies could be applied to active crossings, but the technology was not ripe for application to passive crossings. It will take several years for the requisite technology to be installed in enough motor vehicles to impact safety at grade crossings, and wayside technologies not yet developed or available would need to be deployed at passive crossings to effectively implement this recommendation. After further consideration of the test results, FRA will not take further actions on this recommendation. FRA will revisit when the technologies are mature.

On December 17, 2019, FRA sent NTSB a letter asking to close this recommendation. FRA re-sent the letter to NTSB on December 1, 2020. On June 24, 2021, NTSB reclassified this recommendation as *Open—Unacceptable Response*.

| Item 43 | | |
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| <p>Issue Date: 4/10/2008 Reiterated 7/3/2017</p> | <p>Recommendation Number: R-08-07</p> | <p>Open NTSB Recommendation: Revise the definition of <i>covered employee</i> under 49 CFR Part 219 for purposes of Congressionally mandated alcohol and controlled substances testing programs to encompass all employees and agents performing safety-sensitive functions, as described in 49 CFR 209.301 and 209.303.</p> <hr/> <p>NTSB Classification and Actions Taken by FRA: <i>Open—Acceptable Response.</i> FRA published a final rule on June 10, 2016, that expanded the scope of drug and alcohol regulations to cover MOW employees as defined in the rule (49 CFR Part 219). On February 2, 2022, FRA published a final rule adding employees who perform mechanical tests and inspections on behalf of a railroad to the scope of Part 219 (MECH rule), in response to the <i>Substance Use-Disorder Prevention that Promotes Opioid Recovery and Treatment for Patients and Communities Act</i> (SUPPORT Act). 87 FR 5719.</p> <p>On February 19, 2019, FRA sent NTSB a letter asking to close this recommendation. On September 16, 2019, NTSB reclassified it as <i>Open—Acceptable Response.</i></p> <p>With the issuance of the MOW and MECH rules, the majority of railroad employees performing safety-sensitive functions are now covered under the existing drug and alcohol regulations. Further, as explained in both rules, FRA found that expanding Part 219 beyond these statutory mandates is not justified. Through post-accident toxicological (PAT) testing of all railroad employees killed in train incidents, FRA continues to monitor other railroad employee crafts. FRA will revisit the coverage issue for individuals who perform other 49 CFR § 209.303 functions, if their rates of positive, post-mortem PAT testing results rise in the future.</p> <p>As discussed at the June 6, 2022, meeting between FRA and NTSB, without data demonstrating the need to extend the regulation further, FRA does not believe that extending testing to others, such as management, who do not directly perform safety-sensitive functions, would provide safety benefits. FRA will send another closure request in 2023.</p> |
| Item 44 | | |

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| <p>Issue Date: 3/2/2012</p> | <p>Recommendation Number: R-12-03</p> | <p>Open NTSB Recommendation: Require that safety management systems and the associated key principles (including top-down ownership and policies, analysis of operational incidents and accidents, hazard identification and risk management, prevention and mitigation programs, and continuous evaluation and improvement programs) be incorporated into railroads' RRP required by RSIA.</p> <p>NTSB Classification and Actions Taken by FRA: <i>Open—Acceptable Response.</i> On January 12, 2021, FRA sent a letter to NTSB asking to close this recommendation based on issuance of the RRP and SSP final rules. On November 17, 2021, NTSB declined to do so until FRA had reviewed and found that all railroads' SSP and RRP plans meet the requirements of the applicable rule. Passenger rail operations and Class I freight railroads were required to have submitted their SSP and RRP plans to FRA for approval no later than March 4, 2021, and August 16, 2021, respectively. FRA has received, reviewed, and approved all such plans. FRA is also in the process of identifying Class II and Class III railroads that must comply with the RRP rule because they demonstrate inadequate safety performance (ISP). After identifying these ISP railroads, FRA will proceed with reviewing and approving their RRP plans. FRA will ask NTSB to close this recommendation.</p> |
| <p>Item 45</p> | | |
| <p>Issue Date: 5/10/2012 Reiterated 1/24/2017</p> | <p>Recommendation Number: R-12-16</p> | <p>Open NTSB Recommendation: Require railroads to medically screen employees in safety-sensitive positions for sleep apnea and other sleep disorders.</p> <p>NTSB Classification and Actions Taken by FRA: <i>Open—Unacceptable Response.</i> See FRA's responses to R-16-44 and R-13-21 (Exhibit B, items 62 and 49).</p> <p>FRA is addressing railroad employees' medical fitness for duty issues sequentially based on NTSB accident investigations of railroad accidents.</p> <p>Once FRA has fully considered how to address obstructive sleep apnea (OSA), it will next consider strategies to address other medical conditions that are also contributing causes to accidents.</p> |

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| | | <p>On June 28, 2018, FRA sent NTSB a letter asking to close this recommendation. On September 5, 2018, and September 16, 2019, NTSB declined to close this recommendation.</p> |
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| Item 46 | | |
| <p>Issue Date: 5/24/2012</p> | <p>Recommendation Number: R-12-27</p> | <p>Open NTSB Recommendation: Require railroads to install, along main lines in non-signalized territory not equipped with PTC, appropriate technology that warns approaching trains of incorrectly lined main track switches with enough time to permit stopping.</p> <hr/> <p>NTSB Classification and Actions Taken by FRA: <i>Open—Unacceptable Response.</i> See FRA’s response to R-06-07 (Exhibit B, item 32).</p> <p>The RSAC Dark Territory Working Group considered safety technologies, including power-assisted switch machines and switch point monitoring systems, as a primary topic. The working group met four times to develop recommendations for standards, guidance, regulations, or orders governing the development, use, and implementation of rail safety technologies in non-signalized territory. The working group developed a draft document recommending the creation of individual railroad plans for the maintenance, inspection, and testing of certain safety devices, including power-assisted switch machines and switch point monitoring systems, currently in use in non-signalized territory. The working group’s draft, however, was put on hold until FRA’s RRP and SSP rulemakings were completed with the expectation that upon publication and implementation of the rules, FRA would determine if the recommendations of the working group are sufficiently addressed. FRA’s final rules related to RRP and SSPs were published on February 18, 2020, and March 4, 2020, respectively. With these regulations in place, railroads are required to identify hazards and develop and implement mitigations to address risks on their systems, which would include risks associated with switch position monitors and indicators. Given this new regulatory framework, FRA has concluded that no additional rulemaking is necessary.</p> <p>On February 19, 2019, FRA sent NTSB a letter stating FRA would take no further action on this recommendation. On September 16, 2019, NTSB declined to close this recommendation.</p> |

| Item 47 | | |
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| Issue Date: 1/28/2013 | Recommendation Number: R-12-41 | Open NTSB Recommendation: Require that passenger railcar doors be designed to prevent fire and smoke from traveling between railcars. |
| | | <p> NTSB Classification and Actions Taken by FRA: <i>Open—Unacceptable Response.</i> Both sliding and swinging doors interact closely with the surrounding carbody structure, at the hinge, track, jamb, pocket, and/or latch. Even minor distortion of that structure due to the forces of collision or derailment, or simply a change in the orientation of the door due to a car being significantly displaced from its upright position, could cause the door to fail to operate as intended. Thus, during an emergency, additional time and effort would be needed to operate the door, delaying egress and access through those doors. Adding weight or tighter seals to make the doors smoke and fire resistant could create a similar distortion and could cost lives in such an emergency. NTSB’s recommendation does not address the need for a design that balances competing safety objectives and does not appear to consider the requirements of FRA’s fire safety regulations for protecting passenger car occupants from fire and smoke. </p> <p> On May 23, 2018, FRA sent NTSB a letter stating FRA would take no further action on this recommendation. On September 16, 2019, NTSB declined to close this recommendation. </p> |
| Item 48 | | |
| Issue Date: 8/14/2013 | Recommendation Number: R-13-20 | Open NTSB Recommendation: Require more frequent medical certification exams for employees in safety-sensitive positions who have chronic conditions with the potential to deteriorate sufficiently to impair safe job performance. |
| | | <p> NTSB Classification and Actions Taken by FRA: <i>Open—Unacceptable Response.</i> FRA is dedicated to addressing medical conditions identified as a safety risk by NTSB or FRA investigations. FRA will take regulatory action if necessary and encourages railroads to make medical issue concerns part of their RRP or SSPs to address their most pressing medical risks. In addition, FRA believes that the FRMP rule, published June 13, 2022, will address the spirit of this </p> |

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| | | recommendation, and FRA will continue to work with industry stakeholders to develop cooperative studies and outreach as appropriate. FRA intends to take no other action on this recommendation. |
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| Item 49 | | |
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| Issue Date: 8/14/2013 Reiterated 1/24/2017 | Recommendation Number: R-13-21 | Open NTSB Recommendation: Develop medical certification regulations for employees in safety-sensitive positions that include, at a minimum: (1) a complete medical history that includes specific screening for sleep disorders, a review of current medications, and a thorough physical examination; (2) standardization of testing protocols across the industry; and (3) centralized oversight of certification decisions for employees who fail initial testing. Also, consider requiring that medical examinations be performed by those with specific training and certification in evaluating medication use and health issues related to occupational safety on railroads. |
| | | NTSB Classification and Actions Taken by FRA: <i>Open—Unacceptable Response.</i> See FRA’s responses to R-16-44 and R-12-16 (Exhibit B, items 62 and 45). FRA is addressing railroad employees’ medical fitness for duty issues sequentially based on NTSB accident investigations of railroad accidents and believes that the FRMP rule, published June 13, 2022, will address the spirit of this recommendation. FRA intends to take no further action on this recommendation. |

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| Item 50 | | |
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| Issue Date: 8/14/2013 | Recommendation Number: R-13-22 | Open NTSB Recommendation: Require all information captured by any required recorder to also be recorded in another location remote from the lead locomotive(s), to minimize the likelihood of the information being unrecoverable as a result of an accident. |
| | | NTSB Classification and Actions Taken by FRA: <i>Open—Unacceptable Response.</i> FRA considered this recommendation and determined that implementation is currently neither technologically or economically feasible (in part because of the limited availability of communications spectrum that would be necessary to implement the recommendation), and that the |

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| | | <p>loss of event recorder data is a rare event that does not justify such a burden to mitigate such an unusual event.</p> <p>On May 23, 2018, FRA sent NTSB a letter stating FRA would take no further action on this recommendation. On September 16, 2019, NTSB declined to close this recommendation.</p> |
| Item 51 | | |
| Issue Date: 12/19/2013 | Recommendation Number: R-13-38 | <p>Open NTSB Recommendation: Work with FHWA to (1) include guidance in the <u>Manual on Uniform Traffic Control Devices</u> (MUTCD) for the installation of advance warning devices, such as movement-activated blank-out signs, that specifically use the word <i>train</i> to indicate the preemption of highway traffic signals by an approaching train, and (2) amend the MUTCD to indicate that preemption confirmation lights, while not intended to provide guidance to the general public, would be useful in providing advance information on train movements to law enforcement and emergency responders.</p> <p>NTSB Classification and Actions Taken by FRA: <i>Open—Acceptable Response.</i> FRA assists FHWA with development of the MUTCD. Additionally, FRA staff participate as members (with FHWA) at meetings of the National Committee on Uniform Traffic Control Devices. FRA continues to support FHWA on this topic and others that improve safety. However, regulatory authority to approve or publish the MUTCD lies solely with FHWA. 23 CFR § 655.603.</p> <p>On May 23, 2018, FRA sent NTSB a letter stating FRA is unable to take further action on this recommendation. On September 16, 2019, NTSB declined to close this recommendation.</p> |
| Item 52 | | |
| Issue Date: 10/22/2014 | Recommendation Number: R-14-48 | Open NTSB Recommendation: Require equivalent levels of reporting for both public and private highway-rail grade crossings. |

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| | | <p>NTSB Classification and Actions Taken by FRA: <i>Open—Unacceptable Response.</i> FRA published a final rule on January 6, 2015, that requires railroads to report specific data elements to DOT’s National Highway-Rail Crossing Inventory (Inventory) for private highway-rail grade crossings. 80 FR 746. Railroads are required to submit information about previously unreported and new highway-rail and pathway crossings to the Inventory and to periodically update existing crossing data. In conjunction with the final rule, FRA revised the form for submitting data to the Inventory and the <i>Guide for Preparing U.S. DOT Crossing Inventory Forms</i> (Guide). The revised Guide directs railroads to submit data to the Inventory for private highway-rail grade crossings that railroads have not traditionally provided. The additional data includes, for example, current daily train counts for various types of train movements, maximum timetable speed over the crossing, typical speed range over the crossing, number and type(s) of track(s) through the crossing, type of train detection for automatic warning devices, and event recorder and health monitoring.</p> <p>On May 23, 2018, FRA sent NTSB a letter stating FRA would take no further action on this recommendation. On September 16, 2019, NTSB declined to close this recommendation.</p> |
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| Item 53 | | |
| <p>Issue Date: 2/2/2015</p> | <p>Recommendation Number: R-15-01</p> | <p>Open NTSB Recommendation: Revise 49 CFR 238.213 to require the existing forward-end corner post strength requirements for the back-end corner posts of passenger railcars.</p> <p>NTSB Classification and Actions Taken by FRA: <i>Open—Unacceptable Response.</i> Train accidents involving a substantial load impacting the middle of a train, as in the May 17, 2013, Metro-North Railroad accident from which the recommendation arose, make up a very small percentage of accidents. Requiring passenger railroads to enhance every passenger car currently in operation consistent with this recommendation would require more material, higher engineering costs, and higher production cost per car, and would not be cost beneficial.</p> <p>On December 21, 2018, FRA sent NTSB a letter stating FRA would take no further action on this recommendation. On September 16, 2019, NTSB declined to close this recommendation.</p> |
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| Item 54 | | |
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| Issue Date: 2/2/2015 | Recommendation Number: R-15-02 | <p>Open NTSB Recommendation: Revise 49 CFR Part 238 to incorporate a certificate of construction, similar to the one found at 49 CFR 179.5, and require that the certificate be furnished prior to the in-service date of the railcar.</p> <p>NTSB Classification and Actions Taken by FRA: <i>Open—Unacceptable Response.</i> FRA believes that the current compliance process is appropriate. The certification program established under 49 CFR Part 179, <i>Specifications for Tank Cars</i>, does not involve an independent technical authority or a government regulatory program. Rather, the certification program is incorporated by reference and relies on a railroad industry association program. Per 49 CFR § 179.5, <i>Certificate of Construction</i>, the party assembling the completed car (i.e., the manufacturer) may supply the AAR with Form AAR 4-2, showing compliance. Currently, there is no such railroad industry association program for passenger rail equipment. Moreover, a certification program, such as the one referenced, would need to be robust enough to address all design variations. Thus, the current compliance process is more appropriate. A certification program of this magnitude would require a level of staffing and funding that is currently outside FRA’s resources.</p> <p>On December 21, 2018, FRA sent NTSB a letter stating FRA would take no further action on this recommendation. On September 16, 2019, NTSB declined to close this recommendation.</p> |
| Item 55 | | |
| Issue Date: 9/29/2015 | Recommendation Number: R-15-35 | <p>Open NTSB Recommendation: Enhance [FRA] medical standards by identifying a list of medical conditions that disqualify employees for safety-sensitive positions because of the conditions’ potential for negatively affecting rail safety.</p> <p>NTSB Classification and Actions Taken by FRA: <i>Open—Unacceptable Response.</i> FRA is addressing railroad employees’ medical fitness for duty issues sequentially based on NTSB accident investigations of railroad accidents. FRA informed NTSB of its approach on March 23, 2016. On September 5, 2018, NTSB rejected FRA’s approach and reclassified the recommendation as <i>Open—Unacceptable Response</i>. FRA intends to continue addressing medical fitness for duty issues individually as needed. FRA does not intend to issue a rule identifying</p> |

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| | | specific medical conditions that disqualify employees from safety-sensitive service. FRA believes that the FRMP rule, published June 13, 2022, addresses the spirit of this recommendation. FRA sent a closure request to NTSB on November 4, 2022. |
| Item 56 | | |
| Issue Date: 9/29/2015 | Recommendation Number: R-15-36 | <p>Open NTSB Recommendation: Enhance [FRA] medical standards by identifying a list of medications whose use disqualifies employees for safety-sensitive positions because of the medications’ potential for negatively affecting rail safety.</p> <p>NTSB Classification and Actions Taken by FRA: <i>Open—Unacceptable Response.</i> As FRA explained in its November 18, 2016, letter to NTSB, FRA believes a list of these medications is best maintained by the Food and Drug Administration. On February 19, 2019, FRA sent NTSB a letter stating FRA would take no further action on this recommendation and outlining FRA’s efforts to address this recommendation in other ways. On September 16, 2019, NTSB declined to close this recommendation and reclassified it as <i>Open—Unacceptable Response.</i></p> |
| Item 57 | | |
| Issue Date: 9/29/2015 | Recommendation Number: R-15-37 | <p>Open NTSB Recommendation: Once disqualifying medical conditions and medications have been identified, develop specific criteria (such as standards for medical test results) that may allow employees who have been disqualified but have been determined by a subsequent, individualized assessment to pose no increased danger to rail safety to obtain a medical certification.</p> <p>NTSB Classification and Actions Taken by FRA: <i>Open—Unacceptable Response.</i> FRA is addressing railroad employees’ medical fitness for duty issues sequentially based on NTSB accident investigations of railroad accidents. FRA informed NTSB of its approach on March 23, 2016. On September 5, 2018, NTSB rejected FRA’s approach and reclassified the recommendation as <i>Open—Unacceptable Response.</i> FRA believes that the FRMP rule, published June 13, 2022, addresses the spirit of this recommendation, and it does not intend to develop</p> |

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| | | specific criteria such as those NTSB recommended. FRA sent a closure request to NTSB on November 4, 2022. |
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| Item 58 | | |
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| Issue Date: 6/9/2016 | Recommendation Number: R-16-32 | Open NTSB Recommendation: Require railroads to install devices and develop procedures that will help crewmembers identify their current location and display their upcoming route in territories where positive train control will not be implemented. |
| | | NTSB Classification and Actions Taken by FRA: <i>Open—Unacceptable Response.</i> On March 28, 2019, FRA sent NTSB a letter stating FRA would take no further action on this recommendation. Federal requirements already cover this subject; the technology is not available and would be expensive to develop; there are few safety benefits to adding this technology; and it would be difficult to justify the requirement due to its cost. On June 21, 2019, NTSB declined to close this recommendation and reclassified it as <i>Open—Unacceptable Response.</i> |

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| Item 59 | | |
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| Issue Date: 6/9/2016 | Recommendation Number: R-16-35 | Open NTSB Recommendation: Conduct research to evaluate the causes of passenger injuries in passenger railcar derailments and overturns, and evaluate potential methods for mitigating those injuries, such as installing seat belts in railcars and securing potential projectiles. |
| | | NTSB Classification and Actions Taken by FRA: <i>Open—Unacceptable Response.</i> On August 23, 2017, FRA sent NTSB a letter requesting reclassification of this recommendation as <i>Closed—Acceptable Action.</i> On June 21, 2019, NTSB declined to close this recommendation and reclassified it as <i>Open—Unacceptable Response.</i> On September 27, 2019, FRA sent NTSB a letter noting that, after extensive evaluation of available mitigation methods for occupant protection, FRA concluded that focusing on passenger containment, interior attachment integrity, and secondary impact survivability is the most effective approach to prevent and mitigate passenger injuries in derailments and overturns. On September 30, 2019, NTSB reiterated this recommendation to FRA. |

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| | | The IIJA requires FRA to undertake a study on this topic. Not later than 2 years after enactment of the IIJA, FRA must provide a report of its findings. This report will satisfy the IIJA requirement as well as this NTSB requirement. |
| Item 60 | | |
| Issue Date: 6/9/2016 | Recommendation Number: R-16-36 | Open NTSB Recommendation: When the research specified in R-16-35 identifies safety improvements, use the findings to develop occupant protection standards for passenger railcars to mitigate passenger injuries likely to occur during derailments and overturns. |
| | | NTSB Classification and Actions Taken by FRA: <i>Open—Unacceptable Response.</i> See FRA’s response to R-16-35 (Exhibit B, item 59). |
| Item 61 | | |
| Issue Date: 1/24/2017 | Recommendation Number: R-16-43 | Open NTSB Recommendation: Require freight railroads to use validated bio-mathematical fatigue models, similar to the models used by passenger railroads, to develop work schedules that do not pose an excessive risk of fatigue. |
| | | NTSB Classification and Actions Taken by FRA: <i>Open—Unacceptable Response.</i> On March 30, 2017, FRA sent an initial response to NTSB indicating that FRA believed many railroads will model the fatigue effects of their schedules using biomathematical models as part of their FRMPs and that FRA had awarded grants to railroads to develop FRMPs voluntarily, including biomathematical modeling. On January 18, 2018, NTSB rejected FRA’s response and reclassified this recommendation as <i>Open—Unacceptable Response.</i> FRA believes that the FRMP final rule, published June 13, 2022, addresses the spirit of this recommendation. FRA sent a closure request to NTSB on November 4, 2022. |

| Item 62 | | |
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| Issue Date: 1/24/2017 | Recommendation Number: R-16-44 | <p>Open NTSB Recommendation: Develop and enforce medical standards that railroad employees in safety-sensitive positions diagnosed with sleep disorders must meet to be considered fit for duty.</p> <hr/> <p>NTSB Classification and Actions Taken by FRA: <i>Open—Unacceptable Response.</i> See FRA’s responses to R-12-16 and R-13-21 (Exhibit B, items 45 and 49) and 82 FR 37038-37039. On March 10, 2016, FRA and FMCSA issued a joint ANPRM requesting data and information on the prevalence of moderate-to-severe OSA among individuals occupying safety-sensitive positions in highway and rail transportation, and its potential consequences for highway and rail transportation safety. 81 FR 12642. The ANPRM also requested information on potential costs and benefits from regulatory actions to address risks associated with motor carrier and rail transportation workers in safety-sensitive positions who have OSA. Approximately 700 comments were received in writing and at three public listening sessions. Most commenters, including employers and unions, asserted OSA regulation was unnecessary. On August 8, 2017, FRA and FMCSA withdrew the ANPRM after determining that OSA was best addressed through “current safety programs and FRA’s rulemaking addressing fatigue risk management.”</p> <p>On January 18, 2018, NTSB sent FRA a letter noting withdrawal of the ANPRM and repeating NTSB’s belief that medical standards must be developed and enforced for railroad employees who have sleep disorders. NTSB reclassified this recommendation as <i>Open—Unacceptable Response.</i></p> |
| Item 63 | | |
| Issue Date: 2/14/2018 | Recommendation Number: R-18-01 | <p>Open NTSB Recommendation: Require intercity passenger and commuter railroads to implement technology to stop a train before reaching the end of tracks.</p> <hr/> <p>NTSB Classification and Actions Taken by FRA: <i>Open—Unacceptable Response.</i> FRA believes a rulemaking would not be an efficient method of addressing this matter. FRA will evaluate alternative methodologies for effectively addressing such risks. In addition, FRA notes that any intercity passenger or commuter railroad that obtained a main line track exception for a passenger terminal, and is not implementing a PTC system in that terminal, must fully comply with the safety measures required under 49 CFR § 236.1019(b)(1)–(3).</p> |

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| Item 64 | | |
| Issue Date: 2/14/2018 | Recommendation Number: R-18-02 | Open NTSB Recommendation: Include the Collision Hazard Analysis Guide for Commuter and Intercity Passenger Rail Service as part of the regulation or part of a detailed compliance manual to assist railroads in implementing 49 CFR Part 270. |
| | | NTSB Classification and Actions Taken by FRA: <i>Open—Acceptable Response.</i> The Collision Hazard Analysis Guide is available on FRA’s website, ³ and FRA has been conducting outreach and assistance to all stakeholders involved with implementation of 49 CFR Part 270. FRA will send NTSB a closure request. |
| Item 65 | | |
| Issue Date: 9/5/2018 | Recommendation Number: R-18-18 | Open NTSB Recommendation: Revise your guidance for inspectors regarding required watchman/lookout equipment and procedures, train all of your inspectors on the revised guidance, and audit subsequent inspections to verify adherence to the specifications outlined in 49 CFR Part 214. |
| | | NTSB Classification and Actions Taken by FRA: <i>Open—Unacceptable Response.</i> See FRA’s response to R-18-16 (Exhibit B, item 38). FRA’s current guidance is consistent with the regulation and no revisions are necessary. Inspectors will continue to utilize appropriate enforcement tools when a railroad fails to adhere to the regulation. FRA trains its inspectors to interpret the rule correctly and to ensure that watchmen/lookouts have appropriate means of providing warnings as stipulated in the railroad’s on-track safety manual. |

³ Available at <https://railroads.dot.gov/elibrary/collision-hazard-analysis-guide-commuter-and-intercity-passenger-rail-service>.

| Item 66 | | |
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| Issue Date: 9/5/2018 | Recommendation Number: R-18-19 | Open NTSB Recommendation: Modify the National Inspection Plan (NIP) to require periodic unannounced inspections for roadway worker protection regulation compliance. |
| | | NTSB Classification and Actions Taken by FRA: <i>Open—Unacceptable Response.</i> See FRA’s response to R-18-16 (Exhibit B, item 38). FRA does and will continue to do unannounced RWP inspections as part of routine oversight and enforcement activity. FRA’s Office of Railroad Safety no longer uses the NIP, and it would not have been the proper mechanism for targeting specific activities, as suggested by NTSB. The NIP was derived from a compilation of accidents, defects, and violations issued over a defined time period. The NIP determined the relative percentage of time inspectors should spend on inspection activities by railroad but did not dictate discipline-specific inspection activities. |
| Item 67 | | |
| Issue Date: 10/9/2018 | Recommendation Number: R-18-24 | Open NTSB Recommendation: Issue a guidance document railroads can use to assess their on-track safety program to ensure it encompasses the role of signal and train control equipment, including redundant protection, such as supplemental shunting devices to protect roadway workers and their equipment. |
| | | NTSB Classification and Actions Taken by FRA: <i>Open—Unacceptable Response.</i> FRA does not believe a federal requirement mandating the use of signal and train control equipment (or any other specific mitigation measure) for redundant protection is warranted. FRA’s RWP regulation at 49 CFR § 214.319(b) requires each railroad to determine how best to provide redundant signal protection for its operations, and it does not require railroads to implement a specific mitigation. Thus, issuing a guidance document, such as that recommended by NTSB, would be contrary to regulation. On April 30, 2019, FRA sent NTSB a letter stating FRA would take no further action on this recommendation. On September 16, 2019, NTSB declined to close this recommendation and reclassified it as <i>Open—Unacceptable Response.</i> In previous discussions, NTSB agreed with FRA |

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| | | that Safety Recommendation R-18-24 is interrelated with R-08-06. NTSB closed R-08-06 after FRA provided, on January 12, 2021, the results of an audit FRA conducted as part of the National Safety Program Plan related to railroads' adoption of redundant signal protections. Because that audit demonstrates that the railroads conducted the required study and implemented risk mitigating measures in § 214.319(b), FRA will request that NTSB reclassify R-18-24 as "Closed–Acceptable Action." |
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Item 68

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| Issue Date: 11/27/2018 | Recommendation Number: R-18-26 | <p>Open NTSB Recommendation: Provide additional training to all your track inspectors on regulatory track safety standards compliance and provide guidance on available enforcement options to obtain compliance with minimum track safety standards when defective conditions are not being properly remediated by railroads on all routes that carry high hazardous flammable materials.</p> <p>NTSB Classification and Actions Taken by FRA: <i>Open—Unacceptable Response.</i> FRA does not agree with NTSB's determination that the broken rail associated with the accident underlying this recommendation resulted from an inadequacy in FRA's enforcement of the Federal track safety standards. FRA trains its inspectors on both interpretation and application of the requirements through annual recurrence training, biennial discipline conferences, and ad hoc special seminars and presentations.</p> <p>Because FRA already provides extensive training on enforcement options, FRA sent NTSB an April 30, 2019, letter stating FRA is fully meeting the intent of this recommendation and will take no additional action. On September 16, 2019, NTSB declined to close this recommendation and reclassified it as <i>Open—Unacceptable Response.</i></p> |
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Item 69

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| Issue Date: 6/21/2019 | Recommendation Number: R-19-08 | Open NTSB Recommendation: Study the efficacy of how signs used in other modes of transportation may be effectively used in the railroad industry. |
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| | | <p>NTSB Classification and Actions Taken by FRA: <i>Open—Unacceptable Response.</i> In compliance with the FAST Act, Amtrak posted adequate, highly visible signage approaching the area where the Amtrak 501 derailment occurred, which gave rise to this recommendation. The crew failed to prioritize their attention and situational awareness to call out and identify the wayside signals and signs properly. Most Class I railroads already have signs for permanent speed restrictions, and FRA estimates that the cost of a new regulation regarding wayside warning signs would be \$70 million with no benefits.</p> <p>On September 27, 2019, FRA sent NTSB a letter asking to close this recommendation. On June 18, 2020, NTSB declined to close this recommendation and reclassified it as <i>Open—Unacceptable Response.</i></p> |
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| Item 70 | | |
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| <p>Issue Date: 6/21/2019</p> | <p>Recommendation Number: R-19-09</p> | <p>Open NTSB Recommendation: Require railroads to periodically review and update their speed limit action plans to reflect any operational or territorial operating changes requiring material safety mitigations and to continually monitor the effectiveness of their speed limit action plan mitigations.</p> <hr/> <p>NTSB Classification and Actions Taken by FRA: <i>Open—Acceptable Response.</i> In addressing R-19-09 and R-19-10, FRA found that (1) railroads already perform these activities as part of their safety operations; (2) PTC systems must reliably prevent overspeed derailments on the nearly 58,000 route miles subject to 49 U.S.C. § 20157; and (3) the Amtrak 501 derailment that prompted this recommendation was due to human error and failure of the operating crew to adhere to posted speed restrictions. Amtrak has updated its timetables and general orders to reflect the speed limits on the curve where the Amtrak 501 derailment occurred.</p> <p>The FAST Act did not authorize FRA to require railroads to update their plans to include curves beyond their original assessments. Further, as was the case with Amtrak 501, the railroad’s plan explicitly applies to all operations with curves that meet the FAST Act criteria, not just those identified under the railroad’s original assessment. In this case, Amtrak and Sound Transit did not comply with their plans, a probable contributing factor in the Amtrak 501 derailment. On September 27, 2019, FRA sent NTSB a letter asking to close this recommendation. On</p> |
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| | | <p>June 18, 2020, NTSB declined to close this recommendation and reclassified it as <i>Open—Acceptable Response</i>.</p> <p>In 2021, the IIJA was enacted, which requires railroads to annually review their plans to ensure the effectiveness of actions taken to enable warning and enforcement of maximum authorized speeds for passenger trains at identified curves. Railroads must submit a revised plan before implementing any new, significant operational or territorial change, including initiating new service. Accordingly, by statute, the IIJA mandate directly implements this NTSB recommendation and FRA will ask NTSB to close this recommendation.</p> |
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| Item 71 | | |
| <p>Issue Date: 6/21/2019</p> | <p>Recommendation Number: R-19-10</p> | <p>Open NTSB Recommendation: Require railroads to apply their existing speed limit action plan criteria for overspeed risk mitigation to all current and future projects in the planning, design, and construction phases, including projects where operations are provided under contract.</p> <p>NTSB Classification and Actions Taken by FRA: <i>Open—Acceptable Response</i>. See FRA’s response to R-19-09 (Exhibit B, item 70).</p> <p>On September 27, 2019, FRA sent NTSB a letter asking to close this recommendation. On June 18, 2020, NTSB declined to close this recommendation and reclassified it as <i>Open—Acceptable Response</i>.</p> <p>In 2021, the IIJA was enacted and includes a provision requiring railroads to submit revised plans before implementing any new, significant operational or territorial operating change, including initiating new service. Accordingly, by statute, the IIJA mandate directly implements this NTSB recommendation and FRA will ask NTSB to close this recommendation</p> |
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| Item 72 | | |

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| <p>Issue Date: 6/21/2019</p> | <p>Recommendation Number: R-19-11</p> | <p>Open NTSB Recommendation: Prohibit the operation of passenger trains on new, refurbished, or updated territories unless positive train control is implemented.</p> <p>NTSB Classification and Actions Taken by FRA: <i>Open—Acceptable Response.</i> FRA regulations state: “No new intercity or commuter rail passenger service shall commence after December 31, 2020, until a PTC system certified under this subpart has been installed and made operative.”⁴ FRA notes that a PTC system is currently governing operations at the location where the Amtrak 501 derailment occurred, which was the basis for this safety recommendation.</p> <p>On September 27, 2019, FRA sent NTSB a letter asking to close this recommendation because existing regulations sufficiently address the issue. On June 18, 2020, NTSB declined to close this recommendation and reclassified it as <i>Open—Acceptable Response.</i></p> |
| Item 73 | | |
| <p>Issue Date: 6/21/2019</p> | <p>Recommendation Number: R-19-12</p> | <p>Open NTSB Recommendation: Remove the grandfathering provision within 49 CFR 238.203(d) and require all railcars to comply with the applicable current safety standards.</p> <p>NTSB Classification and Actions Taken by FRA: <i>Open—Unacceptable Response.</i> FRA granted special approval for the Talgo Series 6 trainsets involved in the Amtrak 501 derailment, based on their ability to demonstrate an equivalent level of safety and mitigation of unique risks pertaining to their operating environment. Notwithstanding the high-energy loading conditions, FRA’s investigation of the derailment found that the end structure supporting the Talgo Series 6 equipment showed no evidence of premature failure and performed “exceptionally well for such a high-energy event.” FRA found no occupant volume was lost due to end-frame compression and the Talgo Series 6 trainsets’ end-frame compression strength was not a factor in this accident’s passenger survivability. As a result, FRA does not believe it is appropriate to remove the grandfathering provision. However, FRA notes that the Talgo Series 6 trainsets involved in the Amtrak 501 derailment have all been taken out of service and scrapped.</p> |

⁴ 49 CFR § 236.1005(b)(6).

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| | | On September 27, 2019, FRA sent NTSB a letter asking to close this recommendation. On June 18, 2020, NTSB declined to close this recommendation and reclassified it as <i>Open—Unacceptable Response</i> . |
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Item 74

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| Issue Date: 6/21/2019 | Recommendation Number: R-19-14 | Open NTSB Recommendation: Reevaluate existing seat secure mechanisms and their susceptibility to inadvertent rotation, to identify a means to prevent the failure of these devices to maintain seat securement. |
| | | <p>NTSB Classification and Actions Taken by FRA: <i>Open—Unacceptable Response</i>. Rotating seat locking mechanisms are, and have always been, considered subject to FRA’s requirements for passenger equipment seat and interior fixture strength attachment under 49 CFR § 238.233. There is no evidence (from either NTSB’s investigation or FRA’s investigation of the accident underlying this recommendation) to suggest that the current 8g longitudinal, 4g vertical, and 4g lateral resistance requirements are inadequate when properly applied. FRA has worked with Amtrak to ensure that its crews follow procedures to ensure the proper securement of rotating seats. Accordingly, FRA will take no further action in response to this safety recommendation.</p> <p>On September 27, 2019, FRA sent NTSB a letter asking to close this recommendation. On June 18, 2020, NTSB declined to close this recommendation and reclassified it as <i>Open—Unacceptable Response</i>.</p> |

Item 75

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| Issue Date: 6/21/2019 | Recommendation Number: R-19-15 | Open NTSB Recommendation: Conduct research into the effectiveness of occupant protection through compartmentalization for passengers whose size (including children) is not within the current range of anthropomorphic passenger sizes in FRA standards. |
| | | NTSB Classification and Actions Taken by FRA: <i>Open—Unacceptable Response</i> . As part of FRA’s passenger equipment safety research program, seat/occupant protection experiments were |

incorporated into full-scale rail car and train-to-train impact tests. Anthropomorphic Test Devices (ATDs) were set up in various seating arrangements and in locations within the rail passenger car and locomotive compartments. Each experiment included different sized ATDs (5th-percentile female and 50th- and 95th-percentile males) to obtain data from the ATDs and seat sensors that account for extremes in size and mass. These experiments did not demonstrate a need to change regulations as NTSB recommends. The main objective of compartmentalization for occupant protection is to contain passengers between rows of seats, so they do not travel distances associated with increasing secondary impact velocities under conditions such as in the Amtrak 501 derailment before they strike another part of the car's interior. Smaller, lighter passengers are less likely than larger, heavier passengers to deform the seat ahead of them and be thrust over the seatback. FRA has determined that compartmentalization is as effective for children as it is for the 5th-percentile female. Compartmentalization is also part of a larger occupant protection strategy that includes recessed or flush-mounted interior fittings and mitigating the consequences of interior surface impacts. Accordingly, FRA will take no further action in response to this safety recommendation.

On September 27, 2019, FRA sent NTSB a letter asking to close this recommendation. On June 18, 2020, NTSB declined to close this recommendation and reclassified it as *Open—Unacceptable Response*.

Item 76

Issue Date:
5/14/2020

Recommendation Number:
R-20-05

Open NTSB Recommendation: Revise your oversight inspection process to focus on roadway worker activities, especially when roadway workers are using train approach warning for protection.

NTSB Classification and Actions Taken by FRA: *Open—Acceptable Response*. FRA disagrees with NTSB's conclusion that the probable cause of the June 10, 2017, accident underlying this recommendation was Long Island Rail Road's decision to use TAW to protect roadway workers on active tracks. As NTSB acknowledges in its report, the roadway workers involved in the accident did not comply with regulations governing TAW. FRA has a comprehensive inspection, audit, and outreach program related to roadway worker protection, and it has proven to be effective.

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| | | <p>Nonetheless, FRA has taken several actions to strengthen its oversight of railroads’ roadway worker protection, including:</p> <ul style="list-style-type: none"> - Changing FRA’s generic “RWP” activity code to eight specific codes to better monitor FRA’s RWP program activities and adjust as necessary; - Conducting recurrent training for Track Division field staff specifically focused on RWP; - Implementing a policy of having all track inspectors conduct one unannounced RWP inspection per pay-period, as practical, to better monitor railroads’ RWP activities; - Training all FRA inspectors, regardless of the technical discipline, to monitor railroads’ RWP activities; and - Creating job-aids to provide to other discipline inspectors to help ensure FRA monitors RWP issues in a uniform manner. <p>Additionally, in 2022, RSAC accepted an RWP task which includes consideration of improvements to TAW.</p> |
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| Item 77 | | |
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| <p>Issue Date: 5/14/2020</p> | <p>Recommendation Number: R-20-07</p> | <p>Open NTSB Recommendation: Promulgate scientifically based hours of service requirements for roadway workers.</p> <p>NTSB Classification and Actions Taken by FRA: <i>Open—Unacceptable Response.</i> FRA does not have authority to carry out this recommendation because roadway workers are not covered employees under the hours of service law (49 U.S.C. § 21101). The statute does not authorize FRA to prescribe hours of service requirements for employees performing functions not defined in the statute.</p> <p>On April 16, 2021, FRA sent a closure request to NTSB. On October 3, 2022, NTSB told FRA to seek the authority or provide an alternative approach. FRA will take no further action.</p> |
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| Item 78 | | |
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| <p>Issue Date: 5/20/2021</p> | <p>Recommendation Number: R-21-01</p> | <p>Open NTSB Recommendation: Require all railroads to establish working limits that prevent trains or other on-track machinery from entering zones where employees, including those who work on or from maintenance of-way equipment or on trains engaged in maintenance-of-way tasks, are working.</p> <p>NTSB Classification and Actions Taken by FRA: <i>Open—Acceptable Response.</i> NTSB has incorrectly interpreted FRA’s regulations. Title 49 CFR § 214.301(c) states (emphasis added): “This subpart prescribes safety standards related to the movement of roadway maintenance machines where such movements affect the safety of roadway workers. Except as provided for in § 214.320, <u>this subpart does not otherwise affect movements of roadway maintenance machines that are conducted under the authority of a train dispatcher, a control operator, or the operating rules of the railroad.</u>”</p> <p>The underlined portion of this rule permits “movements” of roadway maintenance machines (including work trains) under the operating rules of the railroad (as in this case of the accident underlying this recommendation) without requiring on-track safety. The protection in these cases is provided by the operating rules themselves, which is consistent with FRA’s historical interpretation of 49 CFR § 214.301(c). Section 214.301(c) only applies when the roadway maintenance machine or work train is traveling and does not apply when any work is conducted. When work is being performed, such as unloading rail, on-track safety must be established. Thus, FRA’s regulations already require on-track safety where employees are working, including those working on or from maintenance-of-way equipment or trains. The use of signal indication and restricted speed is not a form of on-track safety and would not satisfy this requirement. FRA sent a closure request to NTSB on December 8, 2021. On December 2, 2022, NTSB declined to close the recommendation, and asked FRA to update its Roadway Worker Protection Compliance Manual to show that RMMs conducting work also require working limits. Pending NTSB’s review of this information, Safety Recommendation R-21-01 was classified <i>Open—Acceptable Response.</i></p> |
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Exhibit C: Open OIG Rail Safety Recommendations to FRA (as of December 31, 2022)

| Item 1 | | |
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| Report and Recommendation Number: Report ST2022028 No. 3 | Report Title: FRA Uses Automated Track Inspections to Aid Oversight but Could Improve Related Program Utilization Goals and Track Inspection Reporting | Recommendation: Revise the Track and Rail and Infrastructure Integrity Compliance Manual to include specific guidance for inspectors completing ATIP-related inspection reports. |
| | | Actions Taken by FRA: In December 2022, FRA issued an internal guidance memo to all FRA track inspectors and contractors involved in recording ATIP-related track inspections. As of December 31, 2022, the substance of that document was being incorporated into the compliance manual. |
| | | Actions to Be Taken by FRA: FRA will finalize the review and edits of the compliance manual that include the updated guidance for inspectors on completing ATIP-related inspection reports. |
| Item 2 | | |
| Report and Recommendation Number: Report ST2022028 No. 4 | Report Title: FRA Uses Automated Track Inspections to Aid Oversight but Could Improve Related Program Utilization Goals and Track Inspection Reporting | Recommendation: Modify the programming logic of the Railroad Inspection System for Personal Computers so that the system will accept only correct ATIP-related inspection report entries. |
| | | Actions Taken by FRA: FRA modified the programming logic of the Railroad Inspection System for Personal Computers so that when automated track inspection program (ATIP) inspections are performed, the system will only accept ATIP-related inspection report codes and other, unrelated codes, are blocked. |
| | | Actions to Be Taken by FRA: None. OIG closed this recommendation on March 13, 2023. |

| Item 3 | | |
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| Report and Recommendation Number: Report ST2022028 No. 5 | Report Title: FRA Uses Automated Track Inspections to Aid Oversight but Could Improve Related Program Utilization Goals and Track Inspection Reporting | Recommendation: Develop and implement training for Track Division specialists and inspectors on how to correctly prepare ATIP-related inspection reports. |
| | | Actions Taken by FRA: As of December 31, 2022, FRA’s Engineering, Technology and Automation and Technical Training Standards Divisions had developed the training. Subsequently, on January 3, 2023, FRA conducted live virtual training for all State and Federal track inspectors and specialists. The training was recorded, and all inspectors and specialists are required to complete the training and an online knowledge test. FRA has made this training a required component of Federal and State track inspectors’ and specialists’ training. |
| | | Actions to Be Taken by FRA: FRA anticipates no other tasks than to continue implementing the training. |
| Item 4 | | |
| Report and Recommendation Number: Report ST2022028 No. 6 | Report Title: FRA Uses Automated Track Inspections to Aid Oversight but Could Improve Related Program Utilization Goals and Track Inspection Reporting | Recommendation: Document and implement the track safety inspection planning processes, including guidance to district track specialists and inspectors on data sources that can be used to inform planning (e.g., risk assessment models, planning tools, and ATIP data). |
| | | Actions Taken by FRA: FRA is continuing to work to finalize, develop, and implement appropriate planning tools and data source platforms to guide districts and individual track inspectors in the planning of track inspection activities. These tools include the Asset Inventory of |

Railroads and Shippers (AIRS) and the discipline-specific Territory Optimization Planning System (TOPS). Once these data platforms are completed, they will be linked to both the track Focused Inspection Plan and Risk Model for inspection planning.

Actions to Be Taken by FRA: FRA will complete planning, tool development, and familiarization and awareness training for inspectors. Target date for completion is the fall of 2023.